MODERN BUSINESS

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Modern Business

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JOSEPH FRENCH JOHNSON

FOUNDER OF

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AND FIRST EDITOR-IN-CHIEF
OF THE

MODERN BUSINESS SERIES

Office Administration

By

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In collaboration with

Graydon Stetson

Vice-President, F. L. Putnam and Company, Inc.

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PREFACE

The volume has been prepared especially for the business man who wishes to familiarize himself with the general problems of the office. The control of a business logically lies in the hands of a central authority. That authority may be one man, or it may be a group of men. It constitutes the administration. It is through the eyes of the administrator that the Text surveys the service-rendering functions of the office. The primary objective has been to show how the right kind of office management facilitates business operations and contributes to effective business control.

After outlining the principles of scientific office management, and illustrating the application of these principles, the discussion centers around a practical problem in office organization. The distribution of office functions is shown by means of a chart, which is, in effect, an outline of the chapter subjects that follow. These subjects cover all of the major office problems with which the administrator is likely to be concerned.

By holding to fundamental principles, the author has succeeded in producing a practical treatise, which will be readily understandable even to one whose ex-

perience may not have brought him in close touch with office activities.

"Office Administration" was written by Dr. T. Lawrence Davis, Dean of the Boston University College of Practical Arts and Letters. In his educational work, Dr. Davis has specialized in the administrative features of office organization and operation.

Inasmuch as the book was planned particularly for the guidance of the administrator, a business man of long experience, Mr. Graydon Stetson, was chosen as collaborator. Mr. Stetson is Vice-President of F. L. Putnam and Company, Inc., investment bankers, of Boston, New York, New Haven, Springfield, and Providence. He contributed valuable advice in connection with the planning of the Text and, from the practical point of view of a successful administrator, he offered numerous suggestions on the chapters as they were written.

The author wishes to acknowledge the assistance of Mr. Edwin M. Robinson, member of the Boston University faculty. Many of the illustrations, as well as parts of the Text, were supplied by him. Mr. Robinson has had wide experience in office management. He has been office manager for the Liquid Carbonic Company, B. Kuppenheimer and Company, and other prominent concerns. At present he is an instructor in Office Management and allied subjects at Boston University.

EDITOR-IN-CHIEF.

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OFFICE ADMINISTRATION

CHAPTER I

ADMINISTRATION

1. *Administration, management, and organization.* —The title, Office Administration, applied to the present Text, has special significance. It is not called Office Management. It is not called Office Organization. There is a definite reason back of the selection.

The words "administration," "management," and "organization," while often used synonymously, actually convey three distinct impressions. Administration determines policies and is interested in the operations that contribute to effective business control. Management attempts to execute most effectively the policies of administration. Organization formulates the "machinery" by which the clerical activities required by management may be carried on efficiently.

Administration is concerned primarily with far-reaching inquiry and discriminating judgment pertaining to business policy rather than with the day-to-day happenings of office routine. Administra-

tion relates to general objectives and their attainment, and to the scientific and ethical principles that enable it to define the policies that shall be the guiding light of management. From this point of view we shall consider various problems that affect the office organization.

2. *Divisions of business.*—We know that the activities of any business may be classified, at least roughly, under the headings of production, marketing, finance and accounting. The administrator never should lose sight of the fact that "the office" exists for the purpose of giving to these four general functions the maximum of assistance at the lowest cost consistent with efficient service. The office usually does not contribute directly to the making of profits, but indirectly it has an important bearing upon the success of the business that it serves. Therefore, in bringing an office organization into existence, or in reorganizing an established office, it is important to remember that the four major functions of business are dependent, to a marked degree, upon the influence of the clerical organization that we know as "the office." Every employee should understand that the office is established and maintained for the express purpose of handling efficiently and expeditiously the primary functions of business: production, marketing, finance and accounting. This basic conception is true in the large office. It is true in the small office. It is, moreover, a fundamental principle of organization.

3. *The service-rendering office.*—For the sake of illustration, let us look at some of the ways in which the office helps the department engaged in producing. If we consider the activities of this department, we see that the office serves it through selecting, training and supervising a competent clerical personnel, through mail and messenger service, through correspondence, through systematic filing methods, through duplicating and printing service, through furnishing clerical supplies and through the preparation of reports and records.

More and more, with the growing complexity of business operations, executives are basing their decisions upon the data presented in statistical charts. Present-day business problems, especially those of the larger houses, are dependent for their solution upon the scientifically-prepared compilations of the statistician. Thus, the contribution of the office through this channel is of vital importance to the control of a business.

At this point we are not concerned with the location or size of the office. It may be represented by a single individual and its equipment may consist only of a single desk in the department concerned. It may comprise a large force and utilize an assembly of desks, office machinery, and elaborate records, in a central office building. From an administrative point of view, we wish to know that, irrespective of size or location, it is performing efficiently all of the facilitating functions assigned to it. By "facilitat-

ing functions," we mean those clerical services that aid in performing the activities connected with production, marketing, finance, and accounting.

4. *Science of management.*—If we are willing to define science as a "body of organized knowledge," it is quite evident that the painstaking analysis of office methods during the last few years has developed a body of principles that rightfully may be considered to constitute a science of office management. Scientific management was discussed in connection with factory operation long before the theories involved reached the office organization. It probably is unnecessary to point out that, in manufacturing establishments, improved methods of production were developed first in the larger plants. Better methods were the natural outcome of keen competition. Ways were found in which to improve shop management. Every effort was made to secure greater output at lower cost. Efficiency of operation was the keynote of management.

5. *Efficiency methods.*—The development of efficiency methods in the factory centered the interest upon every operating function. Standards of performance were established. Human factors were given definite consideration. The importance of reliable records was recognized. Schedules of operation and standard instructions came into existence. Instead of an employee being allowed to select the method of procedure that happened to appeal to him most, a standard method of procedure for the

performance of each operation was determined by experts. Widespread recognition was given to the fundamental principles involved, as they were discovered and formulated.

6. *Application to offices, large and small.*—After a time, it was found that the same scientific principles that had reduced manufacturing costs and increased both output and efficiency could be applied successfully to the operation of the office. The most important developments took place originally in the larger offices in much the same way as the first developments, in the case of factory operations, took place in the larger plants. In much the same way that improved methods of manufacturing procedure were finally adopted in the smaller plants, so improved methods of office procedure logically have found their way into the smaller offices. The problems are the same, but in the large office they are "magnified" to an extent that makes them ideal for scientific study. We must not forget that the scientist places his subject under the microscope for careful scrutiny.

7. *Scientific office management.*—When organizing an office, or reorganizing one already in existence, the administrator should have in mind certain fundamental principles of scientific office management. He should remember that:

(a) The first essential step is the determination of the work to be done by the office, and its purpose. A study should be made of the clerical needs of

each department of the business that is to be served by the office. In some cases it is possible that some, or all, of the activities should be carried on within the specific department to be served. On the other hand, perhaps some, or all, could be carried on to greater advantage in a central office. A broad point of view, and a regard for the needs of the business as a whole, should guide the organizer in arriving at a decision pertaining to the proper delegation and supervision of clerical functions.

(b) Each problem should be divided, through careful analysis, into its component parts. Information pertaining to the problem should be sought from every available source. There are various circumstances under which, and perhaps various ways in which, each office activity may be conducted. The factors of time, energy, and space must be considered. The organizer's task is to determine the one best way in which each activity can be performed so that it may contribute most effectively to the business as a whole, at the lowest cost consistent with efficiency.

(c) The next step is to choose with scientific care a clerical staff consisting of persons who seem best qualified to perform the predetermined duties.

(d) Every employee of the office should be instructed carefully how to do the work assigned to him. He should be helped to see the significance of every duty he performs, of every record he uses, and of every report he prepares.

(e) Carefully-though-out instructions should cover all clerical operations.

(f) Every employee should be enabled to see the exact way in which his work relates to the other

work of the office and how it helps constructively to serve production, marketing, finance and accounting.

(g) A definite scheme of organization and control should be established.

8. *Division of responsibilities and duties.*—As pointed out under item (a), some duties may be performed in the production, marketing, finance and accounting departments. However, it is also possible that nearly all can be segregated and performed more satisfactorily in a central office. Theoretically, it would seem feasible to place under one management all activities of a facilitating nature. Yet, occasionally, conditions within a given business make desirable a partial division of this particular authority.

For instance, it frequently is necessary for office clerks to work directly in the production department. The head of this production department logically is expected to determine the work to be done. The same situation may exist elsewhere in the business. In some cases, responsibility for determining what clerical work is to be done may be left with the department head, and responsibility for determining just who is to do this work, and how it is to be done, may be assigned to an office manager. If the office activities are sufficiently varied and extensive to necessitate as many as fifty employees, it probably will be advisable to place these activities under the guidance of a well-qualified manager, who will be responsible for the management and control of all

clerical operations. At any rate, some method of planning and supervising must be devised that will bring about the certain accomplishment of all tasks.

The responsibility of the office manager is threefold. He must be competent to organize, to deputize, and to supervise. His chief duty is to direct other people. He must be a sympathetic disciplinarian, a real student of human nature, if his career is to be marked with success. By nature, he must be methodical. He must be able to grasp ideas quickly and to act with decisiveness. His breadth of experience should stamp him as the genuine leader of his subordinates.

9. *Establishing a control mechanism.*—With an office in working order, the organizer's undertaking is brought to fulfillment by the creation of a control mechanism that will bring assurance of the completion of all office tasks in the order, time, and precise manner in which such tasks are scheduled. The mass of office detail must be untangled, classified, and "kept at the finger-tips" of the one in charge. He must see that the flow of work goes on without interruption, that each duty is performed in proper sequence, and that the work is finished in keeping with the predetermined schedule. He must know through what means, and by whom, each activity is to be accounted for. This responsibility involves, of course, a knowledge of what each employee can accomplish in a given period, a knowledge of the steps, and the sequence of the steps, to be taken to

bring proper results, and a knowledge of the means available in the organization to permit the bringing about of such results in a given time.

10. *Leffingwell's principles.*—Eight principles of scientific office management have been promulgated by W. H. Leffingwell:

(a) Define your purpose
(b) Analyze your problem
(c) Seek the facts
(d) Define the one best method
(e) Find the person best fitted
(f) Teach the person best fitted the one best method
(g) Plan carefully
(h) Win coöperation

11. *Developing an organization.*—Organization constitutes the bringing together, in effective correlation, of the human beings and equipment that are necessary to perform efficiently the facilitating functions required of the office. It embraces the establishment of routine processes, job analysis, and standardized practices. It includes the planning and scheduling of work, and the preparation of office manuals. It covers all of the general service activities, together with such functions as stenographic and duplicating service, intercommunication, mailing and filing.

The most important factor in organization is the human element. The selection of workers, and their training, supervision, compensation, incentives, and welfare must receive prime consideration. Equipment is likewise a major problem. Office furniture,

appliances and supplies must be selected with a view to efficient utilization. Space distribution, location of aisles, and the provision of adequate lighting, heating, and ventilating facilities require careful attention.

Efficient organization can result only through patient study. After a suitable plan has been developed and applied, various budgets and reports are necessary to keep the efficiency of the organization unimpaired, or, in other words, to keep it under definite control.

REVIEW

Explain the difference between the terms "office management," "office organization," and "office administration."

Outline the functions of the office in a business establishment.

State what is meant by "scientific office management."

Name the seven fundamental principles of scientific office management that should be kept in mind in organizing an office.

Explain the method of administering office duties that are performed in departments other than the central office.

List the factors involved in establishing a control mechanism for the office.

NOTE: The review questions throughout this Volume are for the personal convenience of the reader in testing his understanding of the Chapter. It is not necessary or desirable for subscribers to submit written answers to the Institute except in a case where they may feel uncertain as to their grasp of the question under consideration.

CHAPTER II

RESULTS THROUGH ORGANIZATION

1. *A typical case.*—A clearer understanding of the importance of sound organization may be obtained by assuming a typical case. An experienced administrator cites this hypothetical problem. Consider the company in question to be a publishing concern located in a large city. It has two monthly magazines and puts out from twelve to twenty books a year. Subscribers to the magazines and books are largely business executives, ranging from presidents down to junior clerks. The company advertises and sells its publications in two ways—by sales letters addressed to present and prospective subscribers, and by advertisements inserted in its own magazines, in newspapers, and in other periodicals. Suppose the business to have been founded some twelve years ago, starting with the publication of one magazine and growing from that small beginning to a present volume of sales amounting to about three million dollars per annum. We will assume that the present owner of the company purchased the business from its former owners about two years ago.

The business had been divided into four departments. These were the usual basic departments:

production, marketing, finance, and accounting. In charge of each was a man who had grown up with the business, a man thoroughly acquainted with the work of his department and its requirements. Each of these department heads had been given full leeway and responsibility for the development of his work, and had vied in friendly rivalry with the others to see who could build the strongest departmental organization.

2. *Surveying the operating organization.*—The new owner had decided that his immediate policy would be not to interfere at any point, but to look on for a while and get acquainted with his department heads and with the work of each department. He realized that this procedure would be of more value to him and to the company than would the making of any immediate changes without careful investigation and sufficient deliberation. In a survey of the methods of operation the conditions which are shown in the following paragraphs were disclosed.

3. *Production department.*—The production function of the business was represented by the editorial workers who were responsible for the preparation of all manuscripts. The company did not actually print its publications. The editorial department was responsible for the editorial content of the books and magazines and followed the work through until the finished products came from the press. The editorial responsibility included such matters as typography,

style, arrangement, layout, format, illustration, and binding.

Besides the editor-in-chief, who was the head of the entire production department, there were three managing editors, one for each magazine and one for the books. There were also a number of assistant editors, who handled various phases of editorial work, ranging from taking care of illustrations and cuts and proofreading to the writing of subheads, captions, and miscellaneous manuscript.

The editor-in-chief and three managing editors each had his own secretary. Two stenographers served the assistant editors. There were four typists. The library of the editorial department was in charge of a librarian and an assistant librarian. The librarian was responsible for the editorial files. She had three filing assistants. Two office boys completed the personnel of the production department. One of them opened and distributed the mail of the department. The librarian usually purchased anything needed in the department, although each editor often bought his own supplies.

4. *Sales department.*—The sales functions were divided into three parts: (a) selling advertising space in the magazines, (b) selling subscriptions to the magazines, and (c) selling books. Each of these functions was under a separate manager, who, in turn, was responsible to the general sales manager of the company. Besides the men actively engaged in selling advertising, magazine subscriptions, and

books, there was a large staff of workers engaged in dictating letters, typing, making sales records of various kinds, and tabulating statistics of sales. Each division had one or more office boys. Sometimes they were very busy and sometimes not.

Because the company did a large mail-order business, and sent out thousands of sales letters, folders, and other kinds of sales literature, a large staff was engaged in mailing work, such as the gathering and stuffing of envelopes, addressing envelopes, sealing and stamping, taking care of changes in address, adding new customers' names, and so on. All correspondence relative to sales matters was filed by divisions, each division having its own files and filing clerks. The magazine-circulation division did much of its own duplicating work.

Incoming mail was sorted by the three secretaries to the division managers. Then it was opened and distributed to the proper persons. As a rule, the mail for the sales department was very heavy, but usually it was all distributed within an hour or so after the office opened. Because of the large quantity of supplies used in this department, such as letterheads, envelopes, and circulars, the sales department did its own purchasing, each division head doing the buying, assisted by his secretary. Two stock clerks and one shipping clerk looked after stock and shipping.

5. *Accounting department.*—All bookkeeping was handled in the accounting department, which was

in charge of a chief accountant, with two assistants, a chief clerk, and an auditor. Since the books often were sold on the installment plan, a large staff of bookkeepers was required. The chief accountant had a secretary. Two stenographers were able to handle what correspondence there was. They were assisted by several typists who addressed envelopes and typed form letters and reports. There were two office boys, who looked after the incoming mail, ran errands, and often helped to seal and stamp outgoing mail.

The chief clerk was responsible for the general discipline of the accounting department, and he was the one who employed and discharged the clerks. He also looked after the purchasing of departmental supplies and held the key to the stationery closet. One of the office boys usually distributed stationery and supplies to the clerks as needed, getting the key from the chief clerk for that purpose.

The accounts receivable ledgers were kept on cards, filed alphabetically by name. Each bookkeeper had a section of the alphabet, which was kept up to date by adding new names, as necessary, and removing old ones as accounts were closed. Ledger cards of paid accounts were not destroyed, but were put in a cabinet and arranged alphabetically. The two stenographers filed all correspondence in their spare time, and were usually not more than two or three days behind in filing. One of the boys ran a duplicating machine which was used to produce form letters.

6. *Financial department.*—The treasurer of the company had charge of the financial department. He was responsible for money received and paid out. He also looked after credit matters and had an assistant who handled collections. Both men had secretaries. The collection manager had a staff of correspondents, who dictated collection and adjustment letters. He also had several typists and stenographers.

The treasurer looked after miscellaneous purchases for his department. He was assisted by a young man who was learning the business. The assistant was also responsible for maintaining the stock of departmental supplies. The treasurer's secretary did a little filing, but the stenographers did most of it.

The telephone switchboard operator, who also acted as information clerk, was listed on the financial department payroll. The same was true of the porter, who did the miscellaneous janitor and cleaning work. If any department head was not satisfied with the telephone or janitor service, he went directly to the operator or porter, as the case might be, and made his complaint.

7. *The organizer's problem.*—Each department was practically an independent, self-contained unit, handling its own work in its own way, without interference from the other departments. The business was growing rapidly, making a fairly satisfactory net profit, and bearing a good reputation. But the large volume of business warranted a larger net

profit. The problem was, how to obtain this larger profit without disrupting an organization that was operating fairly smoothly.

The net profit could be increased in two ways—by increasing the volume of sales without increasing the expense, or by decreasing the expense without decreasing the volume of sales. It was necessary to proceed carefully, to retain the existing volume of business, and to increase it. Any cut in expenses had to be made without interfering with some necessary service that was being rendered to customers.

The sales department was the first to be studied. The aim of this department was to sell advertising, books, and magazines. These important questions were raised: Was the sales department doing everything it could to increase the sales? Was the department doing anything that did not directly relate to sales? Were the division sales managers spending any energy on non-sales-producing activities? In other words, could the sales-producing ability of the general sales manager and division sales managers be increased and concentrated on the single function of selling? Inasmuch as a careful study showed no vital inefficiency in the sales department, the attention of the administrator was directed to the other three departments.

8. *Analyzing the organization.*—For the purpose of analyzing the departments, a diagram, shown in Fig. 1, was prepared, listing the chief purpose of each department and the kinds of workers employed.

In each department were a few people who were doing highly specialized work. The rest were doing about the same kind of work that was being performed in the other departments. In all departments employees were dictating, transcribing, and filing letters. Each department had its office boys, mail clerks, supply clerks, secretaries, typists, and so on.

The question then arose as to how much time and energy each department manager was devoting to supervising activities that appeared to be common to all departments. The sales managers were supposed to be experts on sales work. How much of their time was given to supervising clerical work? When supervising clerical work, they evidently were not concentrating on sales problems. The editors could not give their entire time to perfecting the editorial content of the magazines and books if they were concerned with supervising typists, file clerks, and office boys. Was the energy of these heads of departments being dissipated to the detriment of their departments?

9. *Modifications in duties.*—What modifications could be made that would improve the situation? If a chief clerk were put into each department, with responsibility for the clerical work, would that relieve the department head, or would it simply mean four more men on the payroll, and another person for each department manager to supervise?

It would not do to transfer all clerks to one of the existing departments, because then the other depart-

SALES	PRODUCTION	ACCOUNTING	FINANCIAL
Purpose:	Purpose:	Purpose:	Purpose:
To sell advertising	To prepare magazines	To keep the accounts	To collect money
To sell subscriptions	To prepare books		To pay bills
To sell books			
KINDS OF WORKERS	KINDS OF WORKERS	KINDS OF WORKERS	KINDS OF WORKERS
Sales managers	Editors	Accountants	Treasurer
Salesmen	Assistant editors	Auditor	Credit man
Advertising men	Proofreaders	Bookkeepers	Collection man
Copy writers	.....	.....	.....
Letter writers	.....	.....	Letter writers
Secretaries	Secretaries	Secretary	Secretaries
Stenographers	Stenographers	Stenographers	Stenographers
Typists	Typists	Typists	Typists
Record clerks	Librarian	.....	.....
File clerks	File clerks	File clerks	File clerks
Office boys	Office boys	Office boys	Office boys
Mail clerks	Mail clerks	Mail clerks	Mail clerks
Addressers	.....	.....	Telephone
Stuffers	.....	.....	Information
Stock clerks	.....	.....	Porter
Shipping clerk	.....	.....	.....
Duplicator	.....	Duplicator	.....
Supply clerk	Supply clerk	Supply clerk	Supply clerk
Purchasing	Purchasing	Purchasing	Purchasing

FIGURE 1—ANALYSIS OF THE DIVISIONS OF A PUBLISHING BUSINESS AND KINDS OF WORKERS EMPLOYED

ment heads would feel that they were being discriminated against. Furthermore, each department head already had all he could do. His responsibilities should not be increased. It finally was decided to create another department, a central clerical bureau, which should perform for the existing departments as many clerical tasks as did not necessarily have to be done directly in the departments concerned.

Then came other questions. What clerical activities were really common to all departments? To what extent could such activities be removed from physical presence in a department without seriously interfering with the work of that department by reason of delays in getting service? Where could the new central clerical bureau be located conveniently, so as to save time in rendering general service to all operating departments, with as little loss of energy as possible? How should an adjustment be made in the space following the removal of several workers from each of the existing departments?

10. *The central service bureau.*—A man from the financial department was placed temporarily in charge of the central bureau as chief clerk. Purchasing and the control of stationery and supplies were the first responsibilities assigned to the central department. Economical purchasing of supplies and a better control of their disbursement resulted.

Control of the telephone, information, and janitor service also was transferred to the central bureau. The handling of incoming and outgoing mail fol-

lowed. Then came the transfer of duplicator work, and supervision over the office boys, file clerks, typists, and, with one or two exceptions, the stenographers.

It also was decided to transfer the stock and shipping division from the sales department to the central bureau. The addressers and "stuffers" were likewise transferred, since their work was purely clerical. The letter writers and secretaries were the only types of clerical workers common to all departments who were left in the operating departments. These employees were to be undisturbed until such time as a central correspondence department could be set up satisfactorily and supervised. The direct contact which these workers had with customers, and the necessity for continuous supervision of that contact, were determining factors in this decision.

In organizing the central clerical bureau, two choices of procedure were open. It was possible to build up an entirely new organization, or to transfer workers to the bureau from their respective departments. One advantage of building up a new organization would have been that employees could be selected to meet the specific requirements of the bureau—employees who might be more amenable to discipline. On the other hand, the transfer of present employees would give the central bureau a staff of clerks who already were familiar with the work. They would have less to learn than new employees, and proper supervision would take care of discipline.

11. *Importance of centralized service.*—One of the first benefits of centralized service is the almost immediate improvement in the quality, and usually an increase in the quantity, of work turned out. This improvement is due to two factors: greater specialization, and closer supervision. A clerk, by concentrating on one kind of work, develops greater skill in that work. Where all the members of a group are doing the same kind of work, a healthy spirit of rivalry results.

The supervisor is able to give more attention to workers, instructing those who need instruction, and stimulating those who need encouragement. He also can prepare written instructions specifying the methods for doing the work of the group. He can train newcomers and keep the methods of work uniform. Such instructions not only show how the work is done but also enable a new worker to become familiar with the organization more quickly than he otherwise would. They help him to understand the relationship of his work to other departments, and provide him with a basis for the more intelligent handling of his own duties.

12. *Central control mechanism.*—A control mechanism was necessary that would assure the completion of all work as planned and scheduled. First, a simple system of reports was inaugurated that would show the volume of clerical work going through the office and the cost of putting it through. These reports would also show the volume of work received

and the amount left over, if any, with the reasons for this condition.

To keep track of the volume of work received, completed, and unfinished, figures covering these items were collected every night from each division of workers in the central clerical bureau. In this way, it was possible to ascertain which groups were not maintaining schedule time in performing their duties. From some groups it was planned to get reports of the work done by individual members, for the purpose of comparing their relative efficiencies.

13. *Clerical costs.*—In watching the cost of the office work, two simple factors were studied: the volume of work, and the clerical payroll. These two factors were broken up into certain units of work representative of each group. They showed whether the volume of work was increasing or decreasing and whether the payroll cost was correspondingly larger or smaller.

The figures were studied over the payroll period. For example, suppose ten girls were engaged in posting charges to the accounts receivable ledger. These girls received a total weekly salary of $250 and turned out about 75,000 postings a week. This meant a unit cost of one-third of a cent for each posting. Suppose the volume of postings increased to 82,500 and another girl was hired at $25 a week. The unit cost would still be one-third of a cent. But if the output decreased to 60,000 without any decrease in

Stenographic Department

(Head Stenographer)

Stenographic service—
- Taking dictation:
  1. In shorthand
  2. On stenotype
- Transcribing dictation:
  1. Shorthand notes
  2. Stenotype notes
  3. Dictaphone cylinders
- Typing of all kinds

All duplicating and copying—
- Multigraphing
- Mimeographing
- Hektographing
- Typing

Necessary records of stenographic department

Filing Department

(Chief File Clerk)

Indexing, filing, and locating correspondence and papers of all kinds
Central tickler or follow-up
Credit department file
Circulation of magazines to company departments
Data and clipping files
File of directories

Control of Forms

(Assistant Office Manager)

Inspecting and passing on all office forms:
1. Before printing, if new
2. Before reprinting, if old

Designing forms
Determining proper amounts:
1. To order
2. To keep on hand

Controlling proper use
Supervising initial use of new forms
Keeping book of all forms
Providing for necessary changes

Mail and Messenger

(Head Messenger)

All messenger service—
1. Between departments
2. Outside of building
3. Intra-office mail

Incoming mail—
1. Getting it from post office
2. Opening, reading, sorting
3. Delivering to proper departments

Outgoing mail—
1. Collecting from departments
2. Folding, enclosing, sealing, stamping and mailing
3. Controlling postage stamps

Intra-office mail service—
1. Collecting letters and papers from departments
2. Sorting these letters and papers
3. Delivering to the departments designated

Miscellaneous work—
- Shaving cylinders
- Keeping executives' desks supplied with pins, clips, pencils, paper, rubber bands, etc.
- Cleaning and filling inkwells
- Sharpening pencils

Records and reports of the department

Purchasing Department

(Purchasing Agent)

Purchasing for all departments, upon requisition—
1. All materials
2. All equipment
3. All stationery
4. All supplies

Responsibility for prices, specifications, delivery, and inspection
Arranging for inspection, maintenance and repair of all equipment in office
Records of purchasing department

Figure 2—Duties of Various Departments of an Office

STATIONERY AND STOCK

(Stock Clerk)

Proper storing of—
1. Stationery
2. Printed forms
3. Books
4. Magazines
5. Miscellaneous supplies

Disbursing these upon requisition
Keeping proper supply on hand and replenishing
Records of stock

SHIPPING DEPARTMENT

(Shipping Clerk)

Receiving all goods delivered from vendors
Packing for shipment books and magazines
Delivering shipments to transportation company and to post office
Records of receiving
Records of shipping

CLERICAL EMPLOYMENT

(Assistant Office Manager)

Seeking, interviewing, and selecting applicants
Providing preliminary instruction in company requirements
Introducing new employees
Following up new employees
Office discipline—including
1. Absence and tardiness
2. Personal conduct

Preparation and supervision of—
1. Office manual
2. Job specifications
3. Instruction sheets
4. Notices to employees

Bulletin boards
Transfers and promotions
Releases and discharges
Vacation schedule
Personnel records

TELEPHONE SWITCHBOARD

(Chief Operator)

Handling and dispatching—
1. Incoming calls
2. Outgoing calls

Arranging and getting—
1. Long distance calls
2. Foreign calls

Recording and controlling personal calls by employees
Directory maintenance
Records and reports of switchboard operator

INFORMATION DESK

(Reception Clerk)

Receiving and directing all callers
"In-and-out" directory of executives
Employees' time records
Incoming and outgoing telegrams and cablegrams
Records and reports on information service

OFFICE MAINTENANCE

(Janitor)

Report needed repairs to purchasing agent
All janitor work
All cleaning
All porter work
Maintenance of lights, shades, etc.
Heat and ventilation

MISCELLANEOUS CLERICAL

(Supervisor)

Addressing work—
Operation of addressing machines
Making address plates
Changing addresses
Hand addressing

Stuffing circulars—
Folding material
Gathering
Enclosing in envelopes

FIGURE 3—DUTIES OF OTHER DEPARTMENTS OF AN OFFICE

the payroll, the unit cost would increase to five-twelfths of a cent.

If the lower output persisted, it would call for a reduction in the ledger-posting group, either by transfer or release, in order to keep the unit cost down. It should be remembered that any increase in the efficiency of working methods should result in a larger output per individual. This improvement would be reflected in a lower unit cost. Unit costs are more reliable as an index of clerical costs than are total payroll figures. The latter have no significance until compared with the output of work.

14. *Office manager's qualifications and duties.*—It was necessary to secure a competent and progressive office manager to operate the central bureau. A man with a good education and a background of substantial experience, particularly along administrative lines, was desired. He should have a personality that would enable him to get along agreeably with others, and at the same time not be so easy-going as to be unable to carry through any reorganization plans that might be found necessary.

When the new office manager was engaged and took charge, his first act was to chart his responsibilities. In listing these responsibilities, he realized that it was physically impossible for him personally to supervise all of the office details. He knew that he would have to depend upon others for a large share of the immediate supervision. Therefore, he personally took full responsibility for the general problems

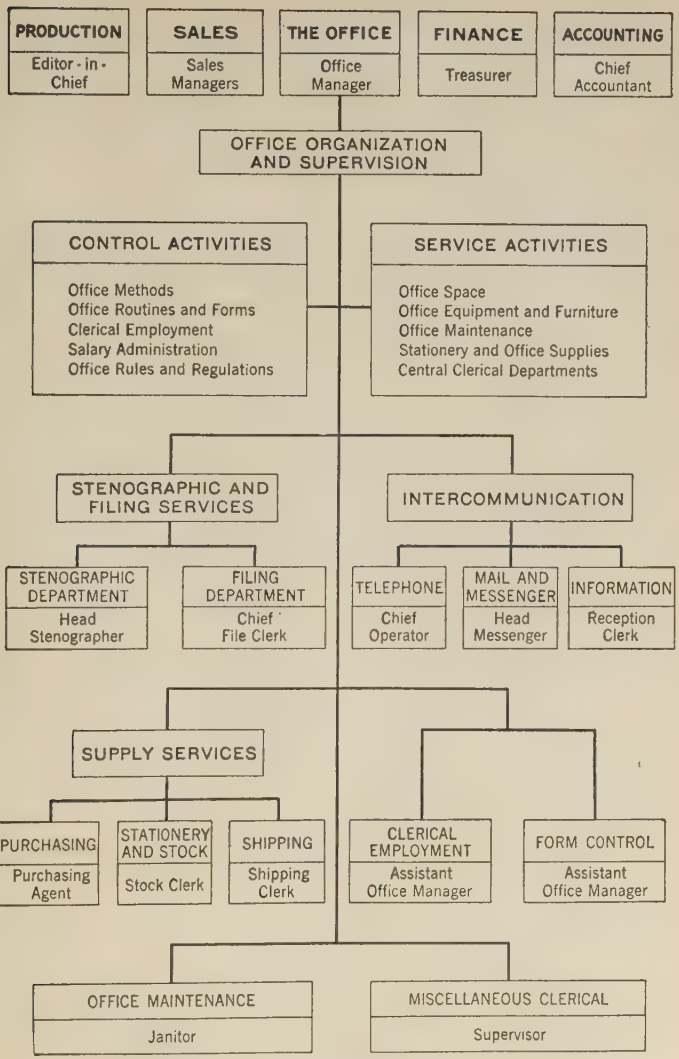


FIGURE 4—ORGANIZATION CHART OF AN OFFICE

of the office organization, and proceeded to deputize certain subordinates with the responsibility for accomplishing specific detailed parts of the work. With the system of deputizing, he put into effect another plan which enabled him to supervise his selected subordinates adequately.

Above each of the various groups of activities, he indicated the person whom he appointed to carry out the responsibility for that activity. The list thus prepared is shown in Figs. 2 and 3.

So that each employee might visualize his work in its relationship to all other work of the company, the manager prepared the chart shown in Fig. 4.

15. *Purpose of chapter.*—This typical and hypothetical problem in office organization has been presented primarily for the purpose of placing before the reader the various factors that must receive the attention of the office manager in any business, large or small. A study of the chart to which reference has just been made will help the reader to understand the significance of each of the subjects treated in the chapters which follow.

REVIEW

Explain the purpose of preparing an analysis sheet, such as illustrated in Fig. 1, for the study of an office organization.

Develop an analysis sheet, similar to Fig. 1, showing the major divisions of the office of your own company, or some other with which you may be familiar. Indicate the purpose of each division and list the classes of workers employed.

Outline the advantages of a "central service bureau" to handle many of the important branches of office work.

State the advantages of the unit-cost basis in analyzing the cost of operations in an office.

List, according to the plan in Figs. 2 and 3, the duties of two important divisions of your own office or some other with which you may be familiar.

CHAPTER III

PHYSICAL FACTORS

1. *Location of office.*—Obviously, office location is one of the first problems that requires the attention of the organizer of a new office. The location should be determined by a thoroughgoing study of the special needs of the business. For a very large concern, a whole building may be necessary. The administrator then comes face to face not only with the question of where to locate, but also with the question of whether it is more advantageous to build or to lease an office structure. An opportunity to build opens the way to adopt a plan closely approaching the ideal. This question, however, is too involved for adequate discussion in this chapter.

A location near to the post office, or to transportation facilities, may be of paramount importance in some instances. Convenience of customers is a factor that must not be neglected, nor should employees' convenience be forgotten. In selecting a site for a retail store, the consideration of customers' convenience overshadows the importance of employees' convenience. It is evident, however, that the situation would be completely reversed in locating a site for the home office of an insurance company, where the

the convenience of the customers need not be considered except for a comparatively small number of callers.

It may be desirable to locate an office in a district that is given up largely to business concerns of a like nature. The name of the street may have considerable weight in the making of a selection. Wall Street, in New York, and State Street, in Boston, for example, are universally associated with financial houses. Maiden Lane, in New York, is recognized as a center of the jewelry trade. Other streets represent insurance centers, leather-trade centers, textile centers, and centers of various other business and industrial organizations.

It also should be kept in mind that office buildings actually do have "reputation." Attention should be given to the "ratings" of, and the nature of the business carried on by, the concerns already located in the prospective building. Leasing office space in a building situated where the environment is likely to be distasteful to customers, or where the street address does not carry the proper prestige, should be guarded against.

Careful attention should be paid to such factors as the adaptability of the space available, building service, ventilation, light and heat, and the objectionable factors of noise, odors, and dust. Allowance for expansion is one of the most important considerations. The space available should be adequate for at least five or ten years ahead, in any newly-leased

office. The decision on this point should be reached as a result of scientific reasoning. Rate of growth in the past, and the effects of any policies of the business that will tend to accelerate or retard this rate of growth in the future will serve as valuable guides.

2. *Noise elimination.*—Noises in the office very definitely cause disturbance and fatigue to the workers. Even slight noises are objectionable. Numerous methods have been devised to reduce such noises to a minimum. Sound-absorbing floor coverings in many cases are a necessity. Linoleum, cork, rubber tile or mastic preparations are suitable for the purpose. Moreover, they add to personal comfort. Bare concrete is objectionable, because it has a chilling effect on the feet in a cool room and is conducive to illness.

Wall and ceiling coverings are obtainable that have a pronounced effect in minimizing noise. These coverings are of various kinds. Some are composed principally of felt, some of fiberboard, and some are composed of plaster. Their importance should not be overlooked.

A college classroom in Newark had been rendered practically useless by exterior noises. The simple expedient of installing sound-absorbing ceiling covering made the room entirely satisfactory for class purposes.

3. *Lighting.*—Adequate illumination improves the effectiveness of the office layout. Natural light is

most desirable, but, unless the windows are unusually large, it rarely is of sufficient intensity at points more than fifteen feet from the outside walls. Few offices can be said to be oversupplied with sunlight. Intense sunlight, however, does cause glare. To diffuse the light throughout the office, the use of some type of venetian blind is to be recommended. However, translucent shades, in cream or buff, may allow sufficient light to pass through, and at the same time serve to prevent glare.

Even in offices well supplied with natural light, adequate facilities must be provided for artificial lighting. It is not advisable to leave such questions to the discretion of the building contractor or the lighting fixture contractor. The local public utility companies, or the lighting institute laboratories conducted by certain of the large electrical companies, are prepared to render authoritative advice on office illumination. From such a source information can be secured regarding the type of lighting to adopt—direct, indirect, or direct-indirect. Advice also can be had regarding the location, height, and spacing of the units, the correct wattage to install to give the desired intensity of illumination, and the general type of fixtures to employ.

Most offices are underilluminated, because of a mistaken idea regarding economy. In the shop, improvements in illumination, at a moderate increase in lighting cost, increase production on an average of about 12 per cent. Similar results can be secured

in the office. The first cost is not all-important. Efficiency of office operation due to good lighting will greatly outweigh the expense involved.

Correct lighting depends to a large extent upon the reflecting surfaces provided by walls and ceilings. Flat paints, free from glare, and in light tints, are to be recommended. Ceilings usually are painted white or canary yellow. Walls are painted a buff or light yellow, with perhaps a deep yellow, gray or green dado (strip about four feet high) around the lower portion, to conceal marks and dust. The reflection factors of the various colors of paint are listed in Table 1.

TABLE 1

LIGHT REFLECTION FACTORS OF VARIOUS COLORS OF PAINT

White	.82
Gray white	.76
Light cream	.74
Golden yellow	.51
Medium gray	.46
Cadet blue	.15
Dark green	.10

4. *Heating.*—Correct heating has a direct influence on efficiency in office work as it pertains to output and to absence due to sickness. Lack of sufficient heat, because of the chilling effect on the body, and excess heat, because it induces dryness of the nose and throat, both pave the way for colds, and even pneumonia. A temperature of 68 degrees Fahrenheit has been found to be most satisfactory. The temperature in an office should never exceed 70 degrees

or fall below 65 degrees. An increase from 68 degrees to 75 degrees may cause a drop in output of work amounting to as much as 15 per cent.

The problem of office temperature is by no means confined to the winter months. It also is important during the summer months. Air-cooling systems have been introduced into certain large office buildings, but their installation is not yet widespread. Ventilating fans are used in some cases and electric fans are commonly employed to produce a cooling effect by circulating the air.

5. *Ventilation.*—Every office should be provided with a sufficient amount of fresh air. Approximately 3,000 cubic feet of air per person per hour are required. If possible the air should be changed from three to five times an hour.

The New York Commission on Ventilation devoted many years of careful study to the subject of correct air conditions. In its report it includes a discussion of three commonly employed methods of ventilation:

(a) Open windows, with gravity exhaust and no fans
(b) Open windows, with window deflectors
(c) Closed windows and plenum fans

The report indicates that natural ventilation, although it has limitations, actually may be superior, in some cases, to other types of ventilation. As the Commission points out, however, "each type of inclosure must be handled as a distinct problem."

A costly ventilating system is not always required for the improvement of conditions in a poorly-ventilated office. On the contrary, an inexpensive exhaust fan, arranged to draw the air out of the office, often will bring about satisfactory conditions. Sometimes ordinary window ventilators, many of them costing only a few dollars, may be used with good effect.

Electric fans, used to bring about a general circulation of air, promote personal comfort and efficiency among the workers. Whenever fans are employed, care should be taken to avoid drafts, which blow papers about and cause discomfort or illness. Fans are available that do not produce drafts, but which keep the air in an office in constant motion. A fan of this type, incorporating a humidifying device, may be used advantageously in many places.

Even simple colds, resulting from drafts, are costly. One mercantile concern has figured that colds cost that company, directly or indirectly, twenty-four dollars each. The installation of a ventilating system in another large office has reduced sickness of employees one-third and decreased lost time, as well as benefits paid on account of sickness, one-half.

6. *Humidity.*—Correct ventilation furnishes a constant supply of pure, fresh air. Adequate heating facilities keep the temperature of the office at an average of 68 degrees Fahrenheit. These conditions are essential to the comfort of office workers. There is another factor of equal importance, and that

is the moisture content of the air. If the air is too dry, evaporation from the surface of the body takes place too rapidly and causes an uncomfortable feeling. Dry air also affects the mucous membrane, rendering the individual more susceptible to colds and germ diseases.

A correct adjustment between moisture content and temperature has a decidedly beneficial effect on the comfort of office workers and, consequently, on the amount of work they do. When the air is very dry, a higher temperature is required than would be the case if the air contained the proper amount of moisture. In a temperature of 63 degrees, with the proper moisture content in the air, an individual would be as comfortable as in a temperature of 70 degrees, with very dry air. Relative humidity thus has a direct bearing on the heating cost. Dry air in an office results in discomfort, loss of time because of sickness, and a general slowing down of work.

Several types of humidifying apparatus are on the market. They have been installed in both factory departments and offices. Air-conditioning apparatus is coming into increasing use for the control of humidity and temperature, and for washing impurities from the air before it is circulated.

REVIEW

Outline the important factors in selecting an office location. List the advantages and disadvantages of the location of your own office.

State the methods of minimizing noises in an office.

Explain the methods employed to provide adequate illumination in the office. Check your own office from this standpoint.

Outline the methods used to obtain good office ventilation.

Explain why correct relative humidity is important in an office.

CHAPTER IV

OFFICE ARRANGEMENT AND ROUTINES

1. *Importance of office arrangement.*—Since the main object of the office is to facilitate the work of the four basic departments of the business, namely, production, marketing, finance, and accounting, it is desirable to consider carefully any steps that may bring about more effective office operation. A study of the arrangement of the desks, filing cabinets, office machines, and other equipment used in carrying on office work represents one of the first steps to be taken. The purpose of such a study is to find out whether the existing arrangement of the office is best, or if there are any opportunities for improvement. A change in arrangement never should be made, however, merely for the sake of a change.

The office arrangement, or layout, as it is called, has an important bearing on the effectiveness of office work, because the placing of desks and other pieces of equipment with relation to one another, determines the direction in which the work of the office moves. Office work is performed largely at desks or machines, but relatively few operations in connection with any one piece of work are performed at any one desk or any one machine. From the time that a

piece of work starts through the office, until the time it reaches its destination, it may pass through several hands, through several machines, over several desks, and often through different departments. Therefore, the office organizer must determine how directly the work moves through the office, and whether there are any delays in or between operations. He never should forget that waste motions are exceedingly expensive and that the unit of work in an efficiently-organized office, as in an efficiently-organized plant, takes as direct a course as possible, from the first to the last operation.

2. *Avoiding waste motions.*—The office organizer also must make sure that the office work does not "double back" on itself unnecessarily in its journey. He must determine whether or not the desks and machines are so arranged that, wherever possible, one employee may pass the work to the next without rising from his desk, or, at least, that he may pass it along with a minimum of travel. If such transfer is not possible, he should determine whether or not regular messenger service, or mechanical pick-up service, can be provided to make it unnecessary for clerks to leave their desks in order to dispose of finished work.

An outstanding management engineer is responsible for the following suggestion. At intervals of one hour each day, for a week, step into the office and observe the number of clerks and officials who are found idly standing around or walking around

the office. Exclude from the count only the file clerks, messengers, and other persons whose work actually requires them to stand. At the end of the week go over the figures thus recorded and calculate the percentage of those standing as compared with the number of clerks and officials whose work is supposed to require them to be seated. "If the percentage runs above ten, it is an indication of defective flow of work." This means, in other words, that those so found are engaged mostly in messenger work rather than in the clerical work to which they are primarily assigned.

3. *The ideal arrangement.*—The ideal toward which the organizer may well strive, though perhaps not fully attain, is to arrange the desks and other equipment, and even the departments themselves, so that the work may flow in natural sequence from one operation to another, without reversals and along the shortest path that can be devised. Work should be brought to each clerk in such amounts, and at such times, as will enable him to perform his operations steadily, without leaving his desk. The number of people assigned to complete the various operations likewise must be adjusted so as to keep the work moving.

The departments of the office should be positioned according to their contacts with other departments and with the public. Related departments should be so situated that they are able to work together closely. Departments at which visitors frequently call, such

as the sales and purchasing departments, should be so located as to make it unnecessary for callers to pass through the office to reach them. The credit department usually should be located next to the accounting department, so that the ledgers can be consulted readily. Correspondents should be near the files to which they must refer frequently.

4. *Space required.*—In arranging desks and machines, consideration must be given to the space required by each clerk and each piece of equipment, to the arrangement of the equipment so that clerks get proper and sufficient light, and to the location of aisles so as to permit any clerk to leave his desk without interfering with his neighbor. Each worker should have enough space to move his chair freely. There should be at least two and one-half feet, and preferably three feet, between desks. An aisle should be left on at least one side of each desk. This aisle is easily provided by arranging desks in columns of twos. Aisles should be straight, and at least three feet wide, with cross aisles at logical distances to preclude unnecessary travel in getting from one part of the office to another. If there are several aisles, the main aisle should be approximately five or six feet wide. Filing cabinets require at least a four-foot working space in front. A five-foot space is better.

The economical use of space is an important consideration in nearly all offices, especially in cities where space is valuable. Compactness, therefore, is

a principle not to be overlooked. At the same time, economies of this kind should not be carried so far that they bring about inefficiency of operation.

If daylight is available, desks should be arranged so that the light comes from the left. Windows never should be located in front of workers and light rarely should come from the rear. It is well to have all desks face in the same general direction, not only because of the light, but because of orderly appearance. Such an arrangement tends to eliminate the distraction caused by two people looking up from their work at the same time and "catching each other's eye." Drinking fountains should be placed at convenient points. There should be a sufficient number of fountains to avoid any congestion, with its accompanying meetings and time-consuming chats.

5. *Providing for expansion.*—It is not easy to tell exactly how much space to allow for expansion. In the case of a new business it is almost impossible, because there is no experience as a guide. Changing business conditions sometimes affect the best-laid plans. At the same time, an estimate of future space needs can be made in most offices and provision allowed accordingly. Since the only reason for needing more office space is a greatly increased volume of office work—which, in turn, is brought about by increased business, by consolidation with another business, or similar causes—a comparison of the experience of the company during the preceding ten

years with the expectations of the next ten years will be a guide in providing space for future expansion. Of course, it must be kept in mind that improved office efficiency may reduce the relative amount of space required.

Five years is probably the minimum period for which future space requirements should be anticipated. In connection with the problem of expansion, consideration should be limited to the major departments of the organization. Extra space never should be reserved for a subdepartment unless in conjunction with the reservation for the major department of which it is a part.

6. *Making a floor plan.*—In rearranging an office there are two factors that are fixed. They are the amount of floor space available, and the number of pieces of equipment that can be placed in that space. The problem, therefore, is to arrange the given furniture within the given space to the best advantage. Several different arrangements may have to be tried before the best plan is secured. The most convenient method of making the layout is to take a floor plan drawing of the office and place on it little pieces of cardboard, called "templates," to represent the different pieces of equipment. These pieces of cardboard, drawn and cut out to the same scale as the floor diagram, and representing the overall outlines of the various pieces of equipment, are moved about until the most satisfactory arrangement is determined. A convenient scale is one-

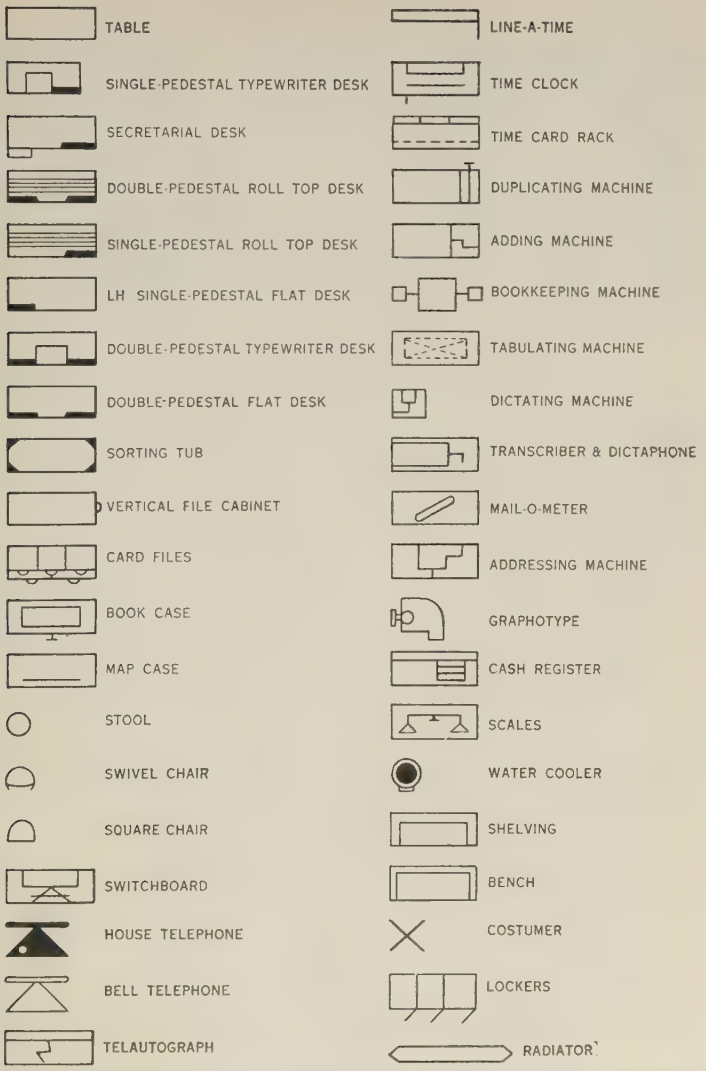


FIGURE 5—STANDARD SYMBOLS USED TO DESIGNATE OFFICE EQUIPMENT

quarter inch to the foot. If the floor plan, drawn to this scale, becomes unwieldly, as would be the case in a very large office, it may be divided into sections.

To make the plan as "readable" as possible, it is well to use a definite set of symbols to designate walls, windows, doors, partitions, radiators, and the various units of office furniture and machinery. Suggested symbols are shown in Fig. 5. By means of these simple symbols, a little rectangle may be made to represent a drawing table, a sorting tub, a map case, a time clock, a certain style of desk, or any one of several pieces of equipment. The advantage of symbols over written or printed designations is obvious.

7. *Tracing the flow.*—A floor plan, drawn to scale, should show everything exactly as it stands, including desks, chairs, file cabinets, tables, bookcases, shelves, doors, windows, posts, radiators, lights, telephones, power outlets, and every other piece of equipment. Any unit of office work may be chosen and its course then traced through the office from the point where it starts to the point where it ends. A colored pencil may be used to show the line of travel from desk to desk, and from department to department. Any back-tracking, crisscrossing, or other deviation from a straight line, will be shown up quickly and clearly. Such a study should be made of the course taken by every kind of work that passes through the office, different colored pencils being

used to distinguish the various kinds. A study of the kinds of work most frequently done will show where improvements are likely to be possible.

8. *Office routines.*—Any careful study of office layout will demonstrate that most kinds of work travel through the office over fairly well-defined paths, stopping at the same desks, and going through the same operations. These paths, which are called "routines," sometimes are distinctly separate from each other. At other times they run together, or cross. One routine may stay entirely within one department. Another may pass through several departments. Some routines seem quite independent of others, not even touching them. Others appear like side tracks branching from a main line. Incidentally, a study of this kind usually points to certain bits of work which seem to have neither head nor tail, work which does not appear to belong to any definite routine, yet which is performed.

The "order routine" is likely to be the largest, the longest, and the most important. The average business is dependent upon orders for its very existence. Therefore, the activities of a business usually center around the orders received.

9. *The order routine.*—"Order routine" relates to the path taken by an order as it passes through the office. Starting with the mail desk, or any other point where orders are first received, the order passes from one desk to another for the performance of successive operations, such as stamping the time of re-

ceipt; registering the order and numbering it; making copies, if copies are necessary; and determining the credit of the customer. Then it passes through the stockroom, if it is a stock order; through the manufacturing department, if it is to be manufactured; through the packing department, the shipping department, the billing department, the bookkeeping department—and finally to the "filled-order files," its ultimate destination.

10. *Illustration of floor plan.*—The two diagrams shown in Fig. 6 illustrate how a routine may be indicated on a floor plan. The diagrams are the representations of sales-order routines. The first diagram shows the course of an order before the office was rearranged. The second shows the course subsequent to the rearrangement. The steps in handling the order, in either case, are as follows:

(a) Opened
(b) Registered
(c) Copied
(d) Passed for credit
(e) Filled in stockroom
(f) Packed
(g) Shipped
(h) Billed
(i) Charged

In the first layout, the stockroom was located next to the sales department, to facilitate the examination of goods by prospective customers. The office was located next to the sales department, and also adjacent to the credit department. Orders were opened

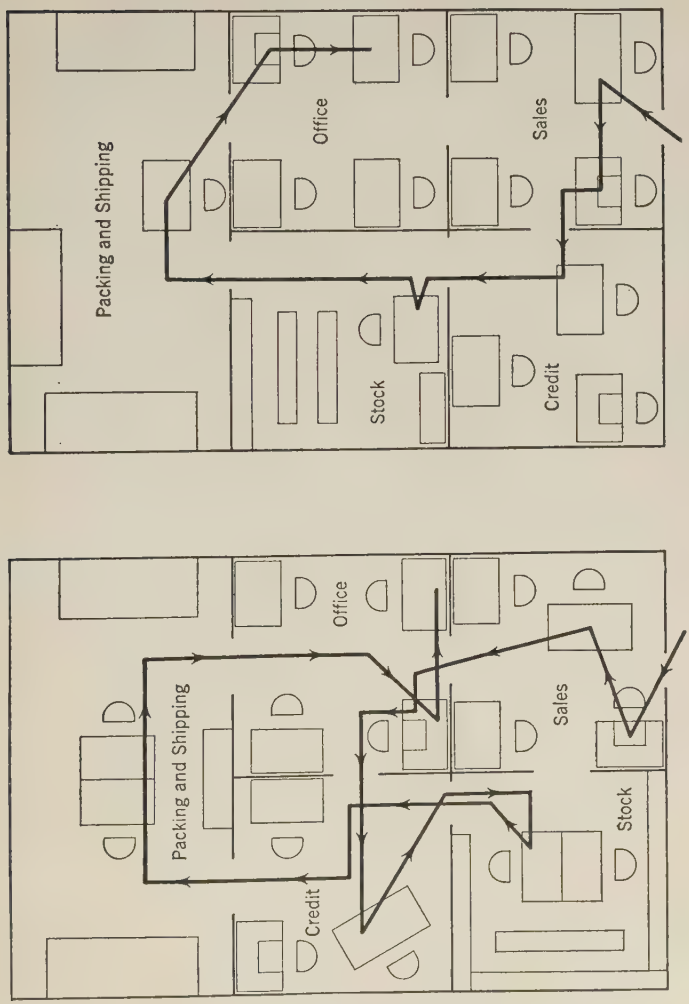


FIGURE 6—ROUTE OF A SALES ORDER BEFORE AND AFTER THE REARRANGEMENT OF AN OFFICE

and registered in the sales department and passed to a typist in the office for copying. From that point, the order went to the credit department for approval.

After approval by the credit department, the order went to the stockroom. There it was filled and sent to the packing- and shipping-room. After the goods were shipped, the order was sent to the billing clerk in the office. This clerk typed the invoice and passed the duplicate invoice to the bookkeeper for posting to the sales ledger.

According to the rearranged plan, the orders are copied in the sales department rather than in the office. The credit department has been moved next to the sales department and the stockroom is now located near the packing- and shipping-room.

All back-tracking has been eliminated. The order moves forward in direct, unbroken course, without interruption. Placing the stockroom next to the packing- and shipping-room was a logical move. It has not in any way hindered the inspection of goods by customers visiting the sales department.

As an order routine is studied, these facts should be noted with respect to each step:

(a) How does the order get to this desk?
(b) What is done to it at this desk?
(c) How is it done?
(d) Why is it done?
(e) Where does the order then go?
(f) Why does it go there?
(g) Who takes it there?

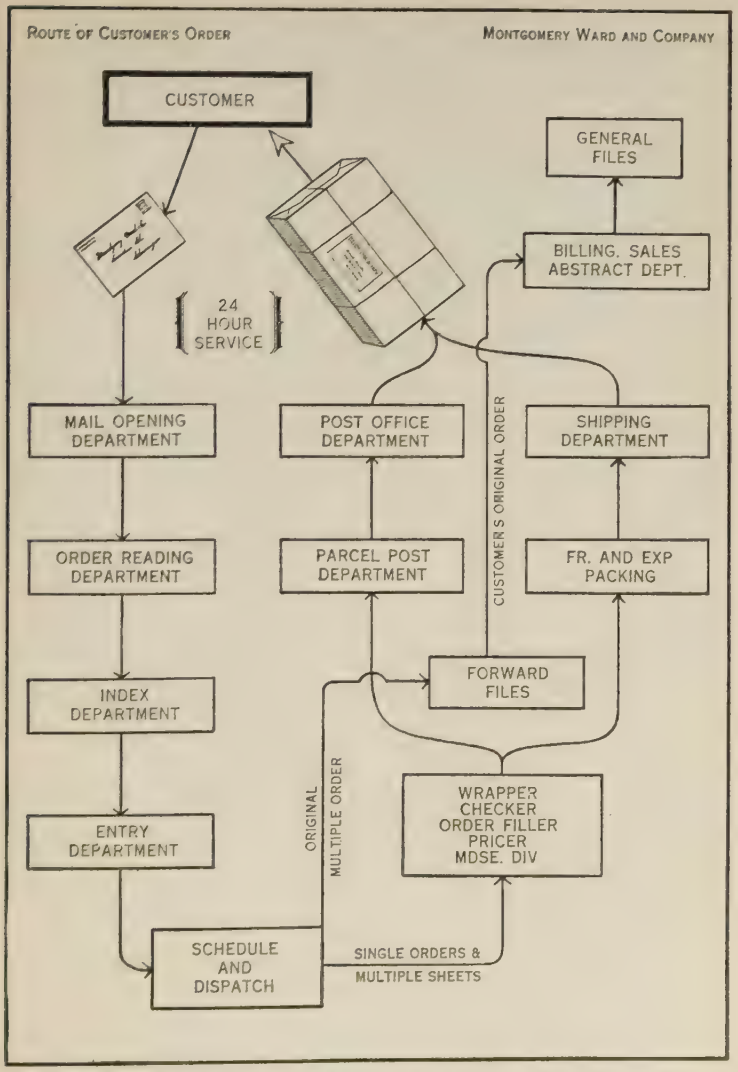


FIGURE 7—ROUTE OF A CUSTOMER'S ORDER THROUGH A MAIL-ORDER HOUSE

11. *General procedure.*—The general procedure is the same, whether the office is small, of moderate size, or large. The object, in all cases, is to keep the work moving in as straight a line as possible.

Correct layout in a small office, where each clerk may handle several parts of a routine, is likely to have a direct effect upon output and efficiency. In such an office, the problem pertains largely to the best arrangement of desks.

In a large office, the problem pertains not only to the arrangement of desks within a department, but also to the arrangement of the departments themselves. Each department must be considered in its relationship to all others, always with the thought in mind that the work should maintain a direct, regular, forward movement in its progress from place to place.

12. *Order routine in the large office.*—Consider the order routine that has been established at the mail-order house of Montgomery Ward & Company. The chart shown in Fig. 7 indicates the route of a customer's order through the house. It will be noticed that scientific office management has enabled this huge organization to send the customer's package on its way within twenty-four hours from the time his order is received at the mail-opening department.

The following description of the steps that are taken in handling a customer's order is quoted from one of the manuals of Montgomery Ward & Company:

(a) Two large General Catalogs, two Sale Books and several special catalogs are issued each year. At regular intervals, catalogs are sent to customers who have ordered from us previously and to others who request copies.

(b) The customer selects merchandise from one of our catalogs and writes on the order the number in catalog, the quantity, name, size, color or finish, and the price of each article desired.

(c) All first class mail is weighed in the bag as it comes from the Post Office. A pound of mail, on the average, will contain about 30 orders. Thus, the number of orders to be handled through the House in 24 hours can be estimated.

(d) The mail opener writes on the face of the order, with blue pencil, the amount of remittance received, and pins the order in an order folder. The remittance is detached and sent to the Banking Unit before the order is referred to the Order Reading Department.

(e) The order reader determines whether the order is for merchandise from one division (single order) or from several divisions (multiple order). The method of shipment, and the number of shipping labels required, are then shown on the order.

(f) The index clerk records on a card the amount of remittance received with order. The lower part of this card is a stencil showing customer's name and address. This is used whenever addressing the customer, as when making shipping labels.

(g) The entry typist enters the items for different divisions on separate sheets if the order is a multiple. This permits all parts of an order to be filled and to arrive at the same time in the Packing Department.

(h) If the order is a single, a packing schedule is stamped on the back of the folder. This shows the day of week and time of day when the di-

vision must have the order packed and released to the Packing or Shipping Department.

(i) If the order is a multiple, a packing schedule is stenciled on the multiple sheets and on back of folder. This shows day of week and time of day when merchandise is due in Packing Department; and, in addition, the numbers of section and basket in which all parts of order will be assembled.

(j) All orders are dispatched by messenger or pneumatic tube to the Merchandise Divisions or Central Pit Department. Here they are sorted for distribution to the pricers.

(k) The pricer compares the information on the order with that shown on the pricing cards to make sure that all information necessary for filling the order is given and that the customer will be charged the correct price.

(l) In the Central Pit Department, a shipping tag, giving a description of the merchandise, is provided for each heavy or bulky article (pit item) carried in stock and packed ready for shipment.

(m) The order filler takes from bins or shelves small articles of merchandise corresponding, in number, quantity and description, to those given on the order. The order, with merchandise, is then placed in the checking rack.

(n) The checker examines each article filled on a single order, or multiple sheet, to make sure that it agrees with the information given by the customer. The order, with the merchandise, is then placed in the wrapping rack.

(o) If the order is a single, it is packed ready for shipment in the merchandise division. It is then placed on a conveyor belt leading to the Packing Department, or on a truck to be delivered to the Shipping Department.

(p) The merchandise filled on a multiple sheet is wrapped so it can be safely carried on a conveyor belt and down a spiral chute to the Packing Department.

(q) The packer in the Parcel Post Department takes the merchandise which has been assembled on the order by the completer and packs it in one or more packages.

(r) The scaler weighs the one or more packages on each parcel post order and after applying the necessary postage stamps, releases the packages to the Post Office Department for shipment to the customer.

13. *Studying routines.*—Several questions arise in connection with office routines. It is necessary to study the purpose of each step in every routine. Is the purpose justifiable? Is the purpose being met? Can the working process be improved in any way? Perhaps certain steps can be eliminated and others combined. Possibly a simple rearrangement of the office equipment will help. It may be well to try out a new arrangement, using the little cardboard templates on the floor plan. The furniture itself never should be rearranged until all the routines have been studied and a decision has been reached as to what rearrangements are likely to be most advantageous.

This study of routines should be made in all departments of the business. It is obvious that there are likely to be many points of contact between the routines of one department and those of another. The relationship between such routines often con-

stitutes a perplexing problem, yet it is one which must be solved if the service of the office is to be thoroughly efficient.

14. *Establishing routines.*—The establishment of routines means that all the operations in any routine will be performed in the same sequence every time. One of the advantages of having definite routines is that the manager can put his finger on any part of the work at any time. He knows exactly what each operation is and he knows its place in the routine. Any operation can be segregated from the routine for purposes of study or, if necessary, the routine itself may be studied as a whole.

In any case, through the means of routines, the manager can more easily control the performance of the work, from the standpoint of quantity and quality. While it would be impossible for him personally to supervise the handling of the mass of minor details that constitutes the office work in its entirety, he finds it relatively easy to supervise the routines. In this way he establishes a definite control over all the office functions.

Each routine should be reduced to writing. If this is not done, even slight modifications, made from time to time, may eventually develop a routine that bears little resemblance to the original. The written description should include step-by-step instructions for performing the routines, and should include all forms used, indicating the desk or desks at which each step is performed. A copy of these instructions

should be placed in the hands of each person concerned with the routine. Such outlines are exceedingly helpful in breaking in new employees.

15. *Changes and improvements.*—Once a routine is established and put in writing, no changes should be permitted without authorized approval. Suggestions for changes should be welcomed and carefully examined, but changes actually should be made only after thorough study has shown them to be desirable. Often a slight change may affect several printed forms and several individuals. It may affect some other routines, perhaps vitally.

The establishment of standard methods of procedure will result in stabilizing the work. As the routine is established, the activities required are divided into such minor operations as may prove to be desirable. These operations are assigned to clerks who specialize in performing them. The advantages of such specialization are evident. The operations that can be carried on by low-salaried employees are assigned to employees of that type. Operations that require the attention of skilled workers are assigned to such workers. This method obviates the waste involved when a relatively high-salaried clerk devotes his time to operations that can be performed by one receiving a lower salary.

16. *The volume and flow of work.*—No consideration of office layout or routines would be complete without a discussion of the volume and flow of work. The "volume of work" has reference to the quantity

of the different items received and handled. For instance, the volume of orders means the number of orders; the volume of invoices means the number of invoices, and so on.

It is obvious that the volume of ledger postings in the bookkeeping division of the accounting department, for any day, is directly dependent upon the number of orders shipped the preceding day. Some days are "heavier" than others, according to the number of orders received and shipped. On the "heavy" days, the bookkeepers may not be able to finish their work within office hours. On "light" days, they may finish early and have some time for other kinds of work. In other words, the flow of work in such cases is uneven. In many offices it never will be otherwise, because of the fact that the volume of incoming orders, upon which the flow of work depends, never can be regulated. Most concerns want all the business they can get. Consequently, there is little likelihood of a tendency to "control" the number of orders.

17. *Controlling the flow of work.*—While the volume of incoming orders is not subject to regulation, the manager surely can regulate the rate at which these orders are put through the order routine. Scientific office management requires and provides that they be so controlled. The only "secret" of controlling the flow of work is in knowing how many orders can be put through the routine per hour, and routing them through at that rate.

Because some operations in a routine take less time than others, it always is necessary to determine the length of time required to perform each operation and the number of clerks needed to handle a stated number of orders per hour. For the sake of illustration, let us think for a moment about the order routine of Montgomery Ward & Company, shown in Fig. 8. We find here that the customer's order

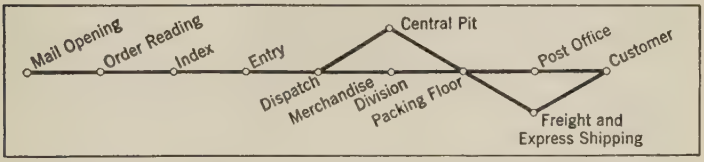


FIGURE 8—GENERAL COURSE OF A CUSTOMER'S ORDER

goes to the mail-opening department, then to the order-reading department, to the index department, and to the entry department. We need not follow the order beyond the entry department.

Let us see what would happen if merely one clerk were stationed in each of the first four departments. The figures used are entirely hypothetical.

Assume that one clerk in the mail-opening department is able to handle 30 average orders in an hour; that a single clerk in the order-reading department handles 60 orders an hour; that a clerk in the index department handles 15 orders an hour; and that a clerk in the entry department handles 20 orders an hour. Tabulating and analyzing the data, we get the following factors:

Employee	Each hour	Time on each order
Mail-opening clerk	30 orders	2 minutes
Order-reading clerk	60 orders	1 minute
Index clerk	15 orders	4 minutes
Entry typist	20 orders	3 minutes

Thus, theoretically, if there are no delays in passing the order from department to department, the average single order can be routed through these four departments in ten minutes. The analysis shows that:

If the mail-opening clerk receives 30 orders an hour, he will be kept busy, because he can handle only 30 orders an hour.

However, the next clerk can handle these 30 orders in half an hour. This means that he will be kept busy only half the time.

The third clerk, although receiving 30 orders from the second clerk, can handle only 15 an hour. This means that orders will be held up at his desk at the rate of 15 an hour.

Since the third clerk can handle only 15 orders an hour, naturally he can pass only this number to the fourth clerk. As the fourth clerk's capacity is 20 an hour, it is evident that he will have time to spare. It will take him only 45 minutes to do his work on these 15 orders.

What is needed to avoid the delay that would be occasioned in passing orders from one department to the next? Obviously, more clerks are needed at certain points. Could more clerks bring about a

smoothly-flowing routine? Theoretically, this is possible.

Let us say that 60 orders an hour are passed to the mail-opening department. Then we find the following condition:

Two mail-opening clerks, each able to handle 30 orders an hour, will be able to pass on to the order-reading department 60 orders an hour.

One order-reading clerk is able to handle successfully, and hand to the index clerk, 60 orders an hour.

Four index clerks, each handling 15 orders an hour, will be needed to pass to the entry department 60 orders an hour.

Three entry typists, each handling 20 orders an hour, will be needed to pass to the next department 60 orders an hour.

Under such a plan we find that orders can be pushed ahead evenly, from department to department, when processes are standardized and clerks in sufficient numbers have been stationed at each stopping place in the routine.

In this manner, practically all office routines can be analyzed, and the rate of flow established. In large mail-order houses, where orders are received daily by the thousands, the number of orders received in the morning determines the rate of flow for that day. Montgomery Ward & Company has found that each pound of mail, on the average, contains thirty orders. Consequently, the simple expedient of weighing the incoming mail before the office opens,

enables the management to have every department so manned for that day that the flow of work can be maintained without interruption.

It is evident that plans must be made to take care of fluctuations in the volume of work. This involves the training of a reserve force that may be called upon to help in those departments which need assistance to maintain the steady flow.

18. *Planning.*—In establishing routines, it is essential to determine the capacity of each individual and the capacity of each department. Each routine problem of every department of the business should be studied systematically. Consideration should be given to the results that are desired and to the work that is involved in the accomplishment of such results.

We may say, therefore, that "planning" consists of selecting the most efficient methods, the best equipment, and the best employees for the accomplishment of a given office task. Planning will result in the establishment of routines for handling the work as efficiently and as inexpensively as possible. This, in turn, means that provision shall be made to avoid an excess or a lack of work at any point. It is obvious that if a given routine consists of many steps, even one or two unnecessary steps will result in great loss of time if the process is repeated over a long period. Hence, one of the fundamental objects of planning is to eliminate all unnecessary steps and motions.

(a) Every step in a routine should have a real purpose.
(b) Every step should serve to push the work forward.
(c) The sequence of steps should be arranged in such a way that the work to be done at any one point in the routine will not delay the service.
(d) As far as possible, each step in the routine should be arranged in such a way that the group of clerks performing that step will be able to handle the same volume of work that every other group in the routine is handling.
(e) No unnecessary work or duplication of work should be permitted.
(f) The amount of work to be done on a given operation should be reduced to a minimum.

19. *Routing and scheduling.*—Routing is the term applied to the process of determining the exact steps to be taken in the routine to be followed. Scheduling is the fixing of a program that governs the receiving and sending forward of work on the basis of a predetermined plan. After a routine has been established, it is not difficult for the manager to schedule the flow of work from department to department. The final step is dispatching, or actually sending the work along its predetermined routine.

REVIEW

Outline the importance of correct office layout.

List the space requirements for desks, aisles, filing cabinets and other equipment.

State what is meant by correct "flow of work" and explain the "template" method used in laying out the office to obtain this condition.

Trace the "order routine" or the path of some other important paper or document in your own office or any other whose operations you may remember.

Explain the procedure to follow in establishing or improving office routine.

State how the volume of work is related to the "flow of work." Outline the method of analysis to be followed to provide the correct number of clerical workers to handle the various tasks.

Comment on the effectiveness of the layout in your own or some other office.

CHAPTER V

THE OFFICE MANUAL

1. *Need for a manual.*—Every well-run office, particularly in the larger type of organization, follows definitely established procedures that usually are outlined in some form of office manual. If employees are to be instructed properly in handling the work assigned to them; if they are to understand the significance of all duties they perform, of all records they use, of all reports they prepare; and if they are to see precisely how their work is related to the other work of the office, they must receive carefully-thought-out descriptions of the business activities, and full instructions relating to the office procedure. These descriptions and instructions may appear as a series of information and instruction sheets; they may take the form of one or more booklets of typewritten or mimeographed pages or they may be given, more formally, in printed publications. Such sheets or booklets constitute the manuals.

2. *Importance of the written word.*—The manual deserves more attention than it usually receives. Whatever is worth telling an employee about his work is worth putting in writing. Numerous misunderstandings could be avoided, and much money saved,

if business executives would require that not only the explanations and instructions that appear in the typical manual, but also all instructions of a specific character relating to the daily work of the office should be prepared and circulated in written form.

In every office, large or small, information regarding company policies, rules and regulations, standards of procedure, and other items, should be supplied to all employees. Too few offices, however, have analyzed this information carefully and put it into writing for ready reference. Oral instructions to new employees are neither as effective nor as clearly understood as those given in printed or typewritten form. It is an easy matter for an employee to forget suggestions or orders that have been given verbally. He has no excuse for failing to follow written instructions.

3. *Manual brings improvements.*—The very act of preparing a manual brings about improvements. Reducing current practice to written form is certain to reveal any existing weaknesses. Consequently, the development of a manual results in refinements in procedure. These refinements logically lead to increased efficiency. The same study also helps to foster the principle of standardization throughout the office and turns the spotlight on all forms of duplication and ineffective methods.

4. *Introducing the manual.*—The introduction of the manual is likely to arouse objections unless it is demonstrated to be a real aid to the employees as well

as to the company. It never should be thrust upon the organization in an arbitrary manner. The administrator must bear in mind that any variations from traditional methods are almost certain to be regarded unfavorably in some quarters. It may seem to an uninformed person that reducing current practice to writing represents an absolute waste of time. Patience, in good measure, may be required to bring everyone affected into line.

Even company officials who are consulted may ask if the manual is worth the cost of its production. They may claim that the introduction of standard-practice instructions represents a straight-jacketing procedure. It may be demonstrated, however, that the most efficiently organized offices, such as those of the great mail-order houses, find the manual indispensable. It is evident that a small office has fully as great a need as a large one to bring about efficiency and save money through the standardizing of operations.

Every person in the organization should be required to write a complete description of every duty he performs, and just as complete a description of how he does it. It is not a difficult matter to show the employee that when once his tasks have been reduced to writing, and the procedure approved, he will have even greater freedom of action than before. He will know, and everyone concerned will know, the responsibilities of his job.

5. *Value to employees.*—If seen in the right light,

office manuals are recognized, by everyone affected, as distinct aids to the employee as well as the employer. Written instructions should be offered with the statement that the company invites suggestions that may result in improvement, that the invitation holds for all time, and that careful consideration will be given to suggestions received. This method of approach tends to stimulate constructive thinking. Even an office boy's suggestion pertaining to his work is worthy of the study of the administrator. A single decision relating to the most acceptable method of doing a piece of work, even of a minor character, may result in better service throughout the organization and the saving of many dollars annually.

The clerks, and their supervisors, should be convinced that the painstaking preparation of job descriptions is to benefit them. An effort should be made, before the preparation of the manual is begun, to create on the part of the workers a genuine desire for the adoption of the idea. Much faster progress will be made if this initial step is taken successfully.

The so-called "Employees' Manual" of Marshall Field & Company has an interesting introduction which reads:

> The spirit is the important part of every rule. No rule seems hard or exacting when we see it is wisely worked out from experience and made necessary by existing conditions.
>
> The object of these rules is not to abridge the rights of any one, but to point out the path which we believe it is

wise to follow. The man who is traveling over unaccustomed roads is grateful for the guide-post which points the way to his destination, even though the sign at the crossing tells him to go the uphill way, because he knows he is on the right road.

Back of these rules we wish all employees to see our earnest desire to conduct this great institution in the most harmonious manner, to give them the benefit of long experience, to save them the retracing of unguided steps, and to help them to grow in the knowledge and application of sound business principles.

The general information and statistics presented in this manual should also be familiar to every employee. To be able to state facts accurately and to talk intelligently about the policies and ideals of Marshall Field & Company should be one of the important aims of every person in this organization.

Preceding this introduction is an inspirational message that indicates the fundamental policy of the concern. Such statements cannot fail to produce a better understanding than would be the case if the ideas involved had never been reduced to writing.

A manual introduced in this manner impresses the employee favorably, provided the thought expressed is based on sincerity of purpose. This type of introduction creates an interest in the other pages of the booklet, and in the general system of manuals. The worker instinctively feels that he is an important part of an organization which has a vital interest in him. He reads in the Marshall Field Manual that the rules have been "worked out from experience"—and, in the last sentence of the booklet, that "Here in the ranks to-day are the generals of to-morrow." Any set of

rules or regulations presented in this way, increases the employee's faith in the organization he serves, gives him a broad view of the business as a whole, and helps to fill him with a zeal to serve that business effectively.

6. *Kinds of manuals.*—The word "manual" does not refer necessarily to a single group of instruction sheets, or to a single booklet. Often, where the manual is used, it consists of two or three sections, in typewritten or printed form. Sections are known by various terms, but they usually resolve themselves into types which may well be classified under such headings as "policy book," "handbook for employees," and "manual of standard procedure."

7. *Policy book.*—The policy book is most conveniently kept in a standard ring binder, so that sheets may be inserted or removed as occasion requires. In it are placed rulings on company policies, as they are made. Sometimes a sheet will be simply a copy of a memorandum covering a policy ruling. The important thing is to put all policy rulings in writing, immediately after they are made, and to furnish department heads, and others concerned, with copies of the ruling. Usually, decisions on policy result from conferences, and a summary of the conclusions of these conferences serves as the record to be filed in the policy book for reference.

8. *Employees' handbook.*—The handbook may be printed in booklet form, or reproduced, by any duplicating process, on letter-size sheets. It embraces

detailed information on office rules (hours, attendance, deportment, holidays, vacations, and so forth) as well as employees' welfare and service. The last-named subject, pertaining to accommodations provided for employees, usually receives careful treatment. The handbook may include information about the history and development of the company and its products. It may show the activities of the various departments, their location and management —so that the employee can see just how he fits into the organization, and so that he can visualize the relationship of his department to the other departments and to the business as a whole.

9. *Manual of standard procedure.*—In the manual of procedure are found the definite written instructions for carrying on the different routines of the company. The activities and routines of each department are described in whatever detail seems desirable. These descriptions are accompanied by standard-practice instructions for performing each routine operation. With the instructions for doing the work, the title of the one who is to do it is given. This plan definitely fixes responsibility. In those offices where routines are subject to frequent modification, the manual of standard procedure usually is kept in loose-leaf form, in standard ring binders, so that new sheets may be inserted, or old ones removed, when changes are made. Some parts of the manual may be sufficiently permanent to warrant printing in pamphlet form.

10. *Departmental manuals.*—For convenience in use, the parts of the manual of standard procedure that pertain to a single department often are issued solely for that department. In such cases, the complete manual is kept in the manager's office, and a copy in the planning department, or wherever else there may be frequent occasion to refer to it. The manuals for correspondents and transcribers, for instance, really are parts of the manual of standard procedure. Each employee receives those sheets that directly concern his work. He is thus provided with definite individual instructions. These instruction sheets show the operations, the standard method of performing them, and, where known, the standard time for their performance. Even the precise motions involved in performing a given task sometimes are shown.

Such a manual should include illustrations of the various forms used, just as they would appear, properly filled out, to cover typical transactions. When such manuals are used, the administrator never finds himself dependent upon the employee's memory. A new employee, moreover, can usually take up his work in comparatively short order, even though he is not given personal instruction by another worker.

11. *General suggestions.*—As we have pointed out, the first step in developing office manuals is to enlist the whole-hearted support of the workers themselves. The next step has to do with the preparation of writ-

ten descriptions of present practice. The study of these descriptions may unearth many unsatisfactory conditions. Even so, sweeping changes should not be attempted immediately. Only the most glaring inconsistencies should be remedied at first. Other improvements in procedure will develop logically in due course.

It is important to remember that methods agreed upon, even tentatively, as representing standard practice, should be put into writing and adhered to rigidly. As new instructions covering any activity are drafted, at least three copies of the typed descriptions of the newly-agreed-upon method should be made. One copy should become a part of the manual itself, one should be posted on the departmental bulletin board, and another should be routed to the desks of those affected.

The preparation of the manual is not the work of a day or even a year. It is a task that entails continual watchfulness and a determination to reveal and correct all hidden weaknesses.

The form of the manual depends entirely upon the peculiar needs of the individual organization. The administrator should not be guided solely by what some other organization may be using. It is his duty to analyze his own problem, and to provide only those instructions that are vital to the proper instructing of his workers. Charts usually are helpful. Often they are included in miniature form in the manual, and also posted in large size about the office, or about

the section of the office vitally associated with the problem illustrated.

The manual should bear the stamp of authority from the company management. For example, the Eastman Kodak Company has produced a group of manuals on "Writing Kodak Letters," in which the following introduction is printed over the signature of Mr. George Eastman, the president:

> Most of our customers have never visited our plants and offices. They do not consider that thousands of letters must be read and answered every day. To them the Company is a personality. When you write, you represent that personality, and your letter pictures the entire attitude and reputation of the Kodak organization.
>
> It's very important, then, that we all consider the opportunities and responsibilities of carrying our message effectively to the mind of every Kodak letter reader.
>
> This is the first of a series of booklets which will describe briefly suggested practice for Kodak correspondence. The material for this series represents the practical ideas of men who have given years to the study of effective letter-writing.
>
> To the new employee, these booklets may prove a helpful guide. To those who for some time have been writing letters—dozens of them every day—though you write uncommonly well, and with years of experience, it would be most unusual if certain of your phrases and practices have not become stereotyped.
>
> Human quality never maintains a level of perfection. And nowhere is human quality reflected more than in the business of writing. Are there any of us who can't afford to review the mechanism and tone of our letters now and then?

With this proper backing of authority, the manual

will be respected and followed. Changes should be made as frequently as the administration decrees, but, until such changes are in effect, no deviations from the written rule should be permitted, except in actual emergencies.

REVIEW

Explain the importance of an office manual.

State the methods by which a manual may be introduced successfully into an office.

Distinguish between the "policy book," the "handbook for employees," and the "manual of standard procedure."

List the items that may be included in a handbook for employees.

Name the items that should appear in a department manual.

Draw up and classify a list of topics that might be included in a manual for some office with which you are familiar.

CHAPTER VI

GENERAL SERVICE

1. *Importance of general service.*—We now come to the point of considering those items that generally are looked upon as minor activities, but which actually warrant the careful attention of the administrator who is endeavoring to establish a well-regulated office. We usually find classified under "general service" the miscellaneous functions that affect the comfort and convenience of the office but which, with one or two exceptions, hardly can be termed "clerical work." The number of persons performing each function is relatively small. Sometimes one person performs several functions. Because of this lack of homogeneity, and because that which is everyone's job is no one's job, there is frequently a tendency to overlook the importance of these tasks. Without proper supervision, they are likely to be neglected or only half done—with consequent inconvenience to everyone.

2. *Reception of callers.*—One of the most important of these miscellaneous functions is that of the reception of visitors. The different terms used to designate the person filling this function vary from "information desk clerk" and "doorman" to "recep-

tion clerk" and "usher." The dignity of the position may vary somewhat with the title, but probably more with the character of the person in whom the title is vested. Administrators who have recognized the vital necessity of greeting and receiving visitors with courtesy and cordiality, sometimes have gone so far as to prescribe carefully, through standard-practice instructions, exactly how to meet every caller, what to say and how to say it, and what to do and how to do it. In general, the purpose of the instructions is to make the reception clerk understand that the company's good will and good name rests upon his shoulders to a greater extent than he may have realized.

Because of the fact that in most offices visitors arrive intermittently rather than continuously, there has been a tendency to combine the information desk with the telephone switchboard. In many cases this plan works out well, but there always are times, under such an arrangement, when the switchboard is unusually busy and when there are a number of callers waiting for attention. The organization is fortunate that has, under these circumstances, a level-headed person on the job—one who works quickly, quietly, and effectively, and who makes all callers feel that they are getting excellent service, even though they do have to wait for attention.

For the best results, this work usually should be handled by a mature man or woman. As a rule, boys and young men are not happy when engaged

in such employment, largely because they cannot see any "future" in it. Young women may do very well in this position, if carefully trained and supervised, but it must be remembered that the opportunities for "visiting" with callers are many. It sometimes is hard for girls or young women to appreciate fully the vital responsibilities of the position, and to realize precisely the effect that any inattentiveness to duty may have upon critical visitors.

3. *Responsibilities of the reception clerk.*—It is essential that whoever is responsible for the reception of visitors should be thoroughly familiar with the facts about the organization, if inquiries are to be handled intelligently. The names of the officers and department heads, and their locations, should represent the very minimum of data of this kind. Some concerns keep at the information desk an up-to-date list of all their office employees. Obviously, a cordial understanding between the reception clerk and the various secretaries to officers and department heads tends to facilitate the proper handling of the duties of this position.

In a small office, a secretary may serve also as reception clerk. Her success in this dual capacity will rest largely upon her ability to impress everyone with the fact that visitors are well treated. The reception clerk represents the first human contact that a visitor has with the company. Every effort should be made to keep that contact genuinely human.

4. *Maintaining proper ventilation.*—Ventilation

probably is the most frequently neglected feature of general service. Even when a mechanical ventilation system is in operation, there are likely to be some members of the organization who are too hot or too cold, who feel a draft, or who complain of the stuffiness of the room. The difficulty usually is partly psychological, and partly due to actual conditions. Relatively few offices are properly ventililated in winter. When it is more generally realized that the quality and quantity of office work are directly affected by conditions of ventilation, undoubtedly more serious attention will be given to the subject. It is not only a health problem, but a problem involving "dollars and cents."

The object of ventilation is to provide a continuous supply of fresh air, without drafts, and to keep the workers alert mentally and physically. Where mechanical ventilation is not supplied, the office should be thoroughly aired every morning before the employees arrive. In winter this is accomplished quickly by opening the windows and doors, but they should be closed soon enough to permit the temperature of the office to rise to 66 or 68 degrees by the hour work is to begin. It is advisable to have the starting temperature slightly lower than normal, since the workers usually are warmed by walking. Thus, as the body gradually cools, the temperature of the room at the same time slowly rises.

Probably the most effective way of controlling and regulating ventilation is to place several thermome-

ters at strategic points in the office and make some one person responsible for keeping the air fresh and the room comfortable. As suggested in Chapter III, if the ventilation of an office seems to present unusual difficulties, it may be well to call in a ventilation engineer to make a survey of the conditions and present recommendations for their betterment.

5. *Maintaining adequate illumination.*—When lighting fixtures are installed, the lamps and shades are selected with a view to obtaining a specific amount of illumination. That illumination is secured *at the start.* But, almost immediately, it begins to decrease. The lamps lose their efficiency and the shades and reflectors get dusty. Before long, unless regular and proper attention is given, the office workers are receiving much less illumination than is regarded as a satisfactory minimum. The efficiency of illumination should be checked by means of a photometer whenever there is the slightest evidence of the need of such a check-up.

After the correct number of units has been installed, of the right type and size, the best method for maintaining effective lighting is to arrange a schedule, covering weekly periods, for the cleaning of shades and reflectors. It is also well to have a schedule for the replacement of lamps. The lamps should be carefully inspected upon completion of these operations. For purposes of maximum efficiency, electric lamps are manufactured to burn for 1,000 hours. Office lights are on, usually, for about

ten to fourteen hours each day, including the time that the janitors are cleaning the rooms. Hence, lamps should be replaced approximately every thirteen weeks. It may prove feasible to replace one-thirteenth of the lamps each week.

6. *Repair and upkeep of equipment.*—The repair and upkeep of the office furniture and equipment are general service functions. Constant use of office equipment results in wear and tear. Chairs get broken, springs weaken, desk-drawer handles come off, and other damage occurs. The most effective way to take care of the repairing of equipment is to provide a central point to which the need of repairs can be reported at once. The mechanic or "handy man," the office manager, the purchasing agent, or whoever is charged with the responsibility for seeing that the repairs are made, takes the steps necessary to have the work done. He also sees that substitute equipment is furnished while the repairs are in progress, and he follows all of the reports closely to see that they are taken care of properly. If repairs are made entirely by outside concerns, the information desk sometimes proves to be a satisfactory central clearing point for the transmittal of data regarding repairs. Reports may be relayed immediately, by the information clerk, to the purchasing department. Then, when the outside repair man reports, he can be directed to the job by the information clerk without delay.

In offices large enough to warrant the employ-

ment of a full-time repair man or mechanic, regular periodic inspection of all equipment has been found desirable. The form shown in Fig. 9 is useful in this connection. Some offices not only provide a regular monthly inspection of office machines, such as typewriters, calculating machines, addressing machines, etc., but arrange to have the office mechanic take each machine in turn and go over it thoroughly—cleaning, oiling, and adjusting it, and making any repairs or replacements that may seem to him to be necessary.

Offices not large enough to justify the full-time employment of a mechanic have found it feasible to arrange for monthly inspection by outside service companies, or by the local representatives of the appliance manufacturers whose machines are used. The cost is nominal, and this practice results in a saving in repairs and in operators' time otherwise lost during breakdowns. Complicated equipment usually is serviced by the manufacturer's local repair men, even in large offices that have their own maintenance crew.

7. *Keeping the office clean.*—Cleaning of offices in public office buildings usually is handled by the building management. However, there are many small jobs that need attention. An office porter, properly supervised, often is found to be a useful member of the staff. Many times, of course, an office boy can do the jobs commonly assigned to a porter. The important points to be watched, in connection with this special cleaning, are the wastebaskets, the floors, the

OFFICE INSPECTION REPORT FOR _____ 193____

To the Office Manager:

Today I have made a thorough inspection of the offices. This is my report of conditions.

_____
Service Manager

Items	O K.	Not O.K.	Dirty	Not neat	Needs repairs	Needs refinishing
DESKS AND TABLES						
Tops						
Drawers						
CABINETS						
Tops						
Contents						
CLOSETS						
Contents						
EQUIPMENT						
Typewriters						
Dictaphones						
Bookkeepers						
Other						
FLOORS						
Marble						
Cement						
Wood						
Linoleum						
Rugs						
FIXTURES						
Partitions						
Railings						
Doors						
DRINKING FOUNTAINS						
Cups						
Waste						
LIGHTS						
Ceiling						
Chandeliers						
Wall						
Desk						
Floor						
WINDOWS						
WALLS						
BULLETIN BOARDS						
WASHROOMS						
Floors						
Basins						
Toilets						
Mirrors						
Cabinets						
REST ROOM						
Floors						
Equipment						
CAFETERIA						
Floors						
Tables						
Steam Tables						
Counters						
Silver						
Dishes						
Glassware						
KITCHEN						
Floors						
Ranges						
Tables						
Pans						
Sinks						
Comment						

FIGURE 9—REPORT FORM FOR INSPECTION OF OFFICE EQUIPMENT

furniture, the windows, and the walls. Each clerk should be held responsible for the cleanliness and neat arrangement of the interior of his desk. Food should not be left in desks, lockers, or cabinets, especially overnight, because it will attract vermin.

Thoroughly effective work cannot be done in slovenly offices. Cleanliness and neatness are fundamental necessities for efficient work. The tops of filing cabinets should be kept clear of papers and rubbish; desks and bookcases should be tidied up daily, and an ample number of wastebaskets should be provided for the disposal of scrap paper and obsolete records. Strict cleanliness should be insisted upon. This program should be supported by daily or weekly inspections. A check list like that shown in Fig. 9 may prove to be useful.

We have called attention to the usefulness of the porter and the mechanic in certain instances. It must be remembered, however, that the wages of every unnecessary employee cut into the net profits of the business. Consequently, all proposed additions to the payroll should be carefully scrutinized, to make sure that each worker engaged will render services that justify the extra cost.

REVIEW

Outline the methods that should be followed in the reception of callers.

State the manner of maintaining correct ventilation in an office.

Explain the method of maintaining adequate office illumination.

State the procedure that should be followed for the repair and upkeep of office equipment. Explain the method used in some office in which you may have worked.

Describe methods that will be effective in keeping the office clean and orderly.

CHAPTER VII

INTERCOMMUNICATION

1. *The problem of intercommunication.*—In most offices there is a continual interchange of papers between departments and between persons located within the various departments. The bulk of this material is comprised of correspondence and office forms. The correspondence may be incoming, outgoing, or intra-office. Intra-office correspondence includes letters, notes, requests, and instructions sent and received by employees within the business establishment itself. Office forms include orders, invoices, bills of lading, cost sheets, drivers' receipts, and other printed sheets used in office work. The problem of intercommunication is concerned with getting these various papers from their starting point to their destination with the minimum expenditure of time and energy.

In every office there also is frequent need of personal communication between executives and department heads, between department heads and employees, and among the employees themselves. This personal communication between individuals may require the actual meeting of those concerned, or it may be carried on by telephone or speaking tube.

First we shall consider the interchange of papers, then personal communication.

2. *Clerical messenger service.*—Papers may be transferred from place to place by the clerks themselves, by messengers, or by mechanical carriers or pneumatic tubes. The chief objection to having a clerk deliver his own papers is that it takes him away from his desk, thereby stopping his own work. It also interrupts the one whom he approaches, thus delaying that clerk's work. Most clerks are paid for their ability to do specific kinds of desk work, and their rate of pay is higher than that of office boys. Therefore, when clerks perform office-boy or messenger duties, they are not giving the full value of their services to the company. This does not mean that clerks never should leave their desks, but it does mean that provision should be made so that it will be unnecessary, in the ordinary course of the day's work, for workers to deliver papers.

Messengers, or office boys, "runners" as they are sometimes called, are usually employed for this work. Each department may have one or more messengers, according to the amount of "running" to be done. Where messengers are attached to individual departments, during most of the time there is not enough messenger work to keep them busy, while at certain times there is more than enough. The problem of disciplining these boys is a very real one. Someone may even have to take time from his own work in order to "find work" for the boys to do.

3. *Centralized messenger service.*—To obviate such a situation, a central messenger department usually is set up. Such a department, under the supervision of a man who understands and likes boys, will be found exceedingly effective, not only in giving messenger service but in doing other work of a miscellaneous character. One of the immediate results obtained from a central service is the increase in the number of messengers available to each department at any one time—notwithstanding the fact that the total number of boys may have been decreased. Where each of six departments might have employed a boy, a central department probably would need only four or five boys. If each department formerly had only one boy available, the establishing of a central department would make four or five boys available in emergencies.

Messengers are summoned from the central messenger department by buzzer. The head messenger should keep a daily record of the calls for boys, showing the departments calling, the time called, the boy sent, the nature of the errand, the time when the boy is sent, and the time when he returns to the central department.

The highest efficiency is not reached in a central messenger department until a regular inter-office mail service is established to carry letters and papers from department to department, or from desk to desk within departments. Such a house-mail service involves regular calls by messengers, at designated "sta-

tions," to collect papers destined for other departments and to deliver papers from other departments. The frequency with which such calls are made depends upon the volume of papers passing through the office. In some offices it is found that half-hourly calls are sufficiently frequent. Others need ten- or fifteen-minute service. Some may require calls every five minutes. The requirements of different departments are likely to vary, and should be met accordingly. In any case, calls should be made frequently enough to prevent clerks from feeling that they should do the errands themselves rather than incur delays by waiting for the messenger.

4. *Mechanical conveyors.*—An analysis of the intercommunication needs of departments may show, in some cases, that nothing less than the steady service of mechanical conveyors will meet the requirements. Such conveyors range from basket or "pick-up carrier" types, to moving belts and pneumatic tubes. These, of course, offer the most rapid method of transmission. Before mechanical conveyors are installed, a survey should be made of the office layout, methods of procedure, and volume of work. Such installations usually are permanent and their proper location for greatest effectiveness is exceedingly important.

5. *Personal communication.*—Where personal communication between individuals is not imperative, meetings or conferences merely delay or interrupt the regular work of those participating in them. Con-

ferences usually are called to discuss important matters, to give instructions and make announcements, or to obtain information. Unless carefully regulated, such conferences are likely to be unnecessarily prolonged. They sometimes degenerate into mere "talk-fests." It also should be remembered that conferences requiring the physical presence of the participants take up time spent going to and from the conference room, in addition to the time spent in conference. Much of this time can be saved by the judicious use of various mechanical and electrical intercommunicating devices. Of these the simplest and most universally employed is the ordinary telephone.

6. *Telephone problems.*—Many concerns use their regular telephone service for inter-office communications. In such cases the office switchboard operator makes the desired connections. Frequently this plan is found to be satisfactory and economical. The only cost for the telephones at the individual desks is the regular monthly instrument charge of the telephone company. This charge of less than five cents a day per instrument is very low compared with the saving in time of the persons concerned.

The greatest objection to using the regular instruments for inter-office communication is that such use ties up the line for other telephone calls from people outside the office. Unless the calls are frequent, however, this objection is no more serious than that which arises when one individual has two tele-

phones, and happens to be talking on one when a call comes in on the other. A carefully trained and intelligent switchboard operator can handle either situation without difficulty or embarrassment. On the other hand, in large offices, where the volume of inter-office telephoning is very great, the demands upon the switchboard operators are likely to become excessive.

7. *Private automatic telephone systems.*—The remedy in such cases is the installation of an independent office-telephone system, of which several types and makes are available. The automatic dialing phone, called the "private automatic exchange," is extensively used in large offices. Each instrument has its own extension number. Calls are made merely by dialing the desired number, as shown in an alphabetical directory of individuals having these instruments. The service is quick, certain, and satisfactory. The cost is not great, since no operators are required. The automatic machine-switching device performs all of the operations required to connect any two numbers.

For a few lines, up to about a score of stations, so-called "intercommunicating phones" may be used. Connection with any desired station is obtained merely by pressing the button for that station. This system uses either desk-type or wall-type instruments, or both, as desired.

Another type of intercommunicating device is known as the "dictograph." Particularly from the

point of view of the administrator this system is most interesting. On his own desk is a so-called "master station." On the desk of as many other people as he may need to reach are substations. To call any one or several of these people, he merely presses the key or keys representing the party or parties wanted. His instrument is so constructed that he uses neither the usual telephone mouthpiece nor the usual receiver. He merely talks to the instrument in an ordinary tone of voice and receives his reply from a loud-speaker within the instrument. He may press as many keys as he wishes, and bring into a single conference as many people, without having anyone concerned leave his desk.

8. *The telautograph and the telephone-typewriter.* —Two other types of intercommunicating systems deserve mention. Both are electrically operated, and both transmit a written message, one handwritten, the other typewritten. For getting and transmitting information quickly, these machines are serviceable and economical. The one which transmits handwriting usually is restricted to stations within twenty-five miles of each other, and is most often employed within a single building, or between buildings in the same city or town. The "telautograph," as this apparatus is called, in transmitting the sender's handwriting, obviously provides a positive identification. This is important in cases where it is necessary to fix the identity of the sender. Anyone can use it, since the message is written with a stylus pencil on a plate,

in much the same manner that one would write any ordinary message by hand.

The telephone-typewriter is not limited as to distance between stations. The telephone company's wires are used between cities, making possible an unlimited number of connections between the main office of a company and its branch offices. The keyboard is arranged like that of a typewriter, and the operation is easy to learn. Transmission is instantaneous, and is cheaper than private long-distance telephone wires if calls are made frequently during each day.

Both the telautograph and the telephone-typewriter are installed in most companies on a lease basis, the installing company retaining ownership of the instruments.

9. *Communication service through dictating machines and paging systems.*—Dictating machines, discussed more extensively in Chapter VIII, often are used advantageously, especially by the executive, in transmitting verbal messages. There are times when he is at his desk, either before or after regular office hours, and finds it necessary to leave an important message for another member of the organization. He may dictate a long message to a record, place that record in its box, and leave a note to his secretary saying that the record itself should be delivered to the person to whom it is directed. The recipient, in turn, will merely place the record on his own dictating machine, set the reproducing needle, press the

lever, and listen to the message. The advantages are obvious.

In every large office it frequently is necessary for executives and department heads to go into the various offices for meetings or to check up on different phases of the work. When they must be reached at these locations, time and trouble are saved by the use of an automatic signaling system consisting of lights, buzzers, or bells installed in the various departments. To each person who is likely to be called, a signal is assigned consisting of a given code of flashes, buzzes, or rings. The signal is sent at a central station, perhaps the office telephone exchange, by the operator; and when the person who is signaled responds over the most convenient telephone, he is placed in communication with the one who wishes to talk with him. The expense of installing such a system is slight, and this method of issuing calls often proves to be unusually effective. It provides a means of reaching the person desired, in the shortest time, and with the least annoyance to others.

10. *Service and cost.*—In considering any intercommunication system, the factors of service and cost must be balanced. The class of service that is desired, or rather the class that is *needed,* and the relative cost of that service are the most important points for consideration. The degree of speed required, and the amount of personal contact necessary, also enter into the question. These factors must be carefully weighed in making a decision.

REVIEW

Describe the methods employed to organize and operate messenger service in an office.

State the advantages of mechanical conveyors for the handling of office papers.

List and describe the various means used to provide for personal communications between individuals.

Describe the operation of the telegraph and the telephone-typewriter.

Explain the use of the dictating machine in office intercommunication.

List the methods of intercommunication provided in your own office, in the order of their relative importance.

CHAPTER VIII

STENOGRAPHIC SERVICE

1. *Stenographic service.*—The management and control of stenographic work are of decided importance to the office manager. In arriving at policies and methods for the operation of this branch of office work, the manager must consider:

(a) The stenographer
(b) The dictator
(c) The means of taking dictation and transcribing it
(d) The material dictated
(e) The conditions under which the work is done

The Boston Chamber of Commerce at one time developed the following definition of a stenographer: "A clerk with ability to make, read, and type stenographic notes and perform such incidental typing and clerical work as may be required." It was realized that this definition was not wholly satisfactory. A special committee of the Chamber then studied the question, with the result that the following classification was produced.

Stenographer, Grade I. Definition.—A clerk with ability to perform stenographic work of the highest technical nature, which requires specialized training, unusual skill, accuracy and reliability, together with a general knowl-

edge of the company's business, and a particular knowledge of the business methods and procedure of the subdivision in which employed; to act as stenographic-secretary to officers of the company or managerial executives and relieve them of details of office work, or to supervise and control the work of other stenographers. Special training in business school required, together with high school or college education, or equivalent.

STENOGRAPHER, GRADE II. DEFINITION.—A clerk with ability to perform ordinary stenographic work requiring ability to make and transcribe notes, a limited knowledge of the company's business routine, and ability to type with speed and accuracy.

STENOGRAPHER, GRADE III. DEFINITION.—A clerk with ability to make and transcribe stenographic notes of the simplest character. No knowledge of the company's business procedure or product required. Limited training in commercial school and grade school education essential.

TYPIST, GRADE I. DEFINITION.—(1) Clerk with ability to type with a high degree of accuracy and skill from dictaphone records, or to do copying work of an involved and technical character, with speed and precision. Work requires high school education or its equivalent and skill gained from brief special training in school, or from experience. (2) Clerk with ability to operate, with a high degree of skill and accuracy, billing machine, or other mechanical typing device in ordinary use in office. High school education, or its equivalent, and skill gained from brief special training in school, or from experience, essential.

TYPIST, GRADE II. DEFINITION.—Clerk with ability to type the simplest forms of copy work with mechanical skill. Grade school education essential. No special training in the operation of machines and only brief experience required.

2. *Value of classification.*—A classification of this nature is of value in that it recognizes different grades

of stenographic ability and indicates that the quality and amount of work expected of the worker depend largely upon where that individual fits into the classification. In other words, stenographers are regarded as being on different levels, from the standpoint of qualifications.

Since the first principle of management is to find out what work is to be done, the administrator, when he considers stenographic service, should determine just what grades of stenographers are required. It is fully as absurd to expect grade-one output from a grade-three stenographer as it is to employ all grade-one stenographers, when there is not sufficient work to keep first-class stenographers busy all the time.

3. *Dictation.*—The dictator is the second general factor in the consideration of stenographic service. He is the one who prepares the material for letters, reports, and other items that are to be typed, and then dictates the data as he thinks they should be written. He is responsible for the quality of the finished product. He should not permit anything to pass his inspection that is not up to the established standard.

Probably the most important requirement of a dictator is that he shall be able to take a given set of facts and weave them into a letter or report that will convey the message to the recipient, adequately and clearly, without waste of words or undue brevity. Obviously, the dictator must have his subject com-

pletely in hand if he is to organize his thoughts and prepare a product that will be readily understood by the recipient.

Clear enunciation is important in dictation and can easily be made a habit through determination and practice. Effective phraseology results from good reading, alert observation, practice in dictating, and from noting reactions to different expressions. Technical knowledge of the company's business often is desirable, although perhaps not so important as many administrators appear to believe.

Two methods are available in selecting competent dictators. A man with the desired technical knowledge may be chosen and then given the necessary instruction in business correspondence; or a man with the correspondent's qualifications may be engaged and then supplied with the technical knowledge. The former course often is pursued by small and medium-size concerns, where dictation is only a part of the dictator's duties. In large concerns, both methods are followed. Sometimes a combination works out most effectively.

4. *Methods of dictating.*—The third factor in stenographic work concerns the taking of dictation and its transcription. Dictating to a shorthand writer is the most widely used form of dictation. The usual procedure is for the dictator to send for the stenographer when he is ready to dictate, and for the stenographer to start transcribing her notes as soon as the dictation is finished. On first consideration, this prob-

lem would not appear to present many difficulties. It does not if the work is properly organized.

5. *Organization of dictator's work.*—Proper organization implies that:

(a) All necessary data are at hand
(b) The stenographer is ready, with notebook and pen, or sharpened pencils
(c) A time is chosen that is early enough in the day to permit unhurried dictation and careful transcription
(d) Both dictator and stenographer have a clear understanding of what is required and how the work is to be done
(e) A typewriter is provided that is in first-class condition, cleaned and oiled
(f) Working conditions are comfortable—not too hot or too cold, not too noisy or too crowded

These conditions are highly desirable and may be obtained by a little careful planning. They are so thoroughly worth while that an office manager who neglects them is overlooking a splendid opportunity to obtain work of the best quality, in large quantity and at low cost.

Collecting the data necessary to dictate a given letter may involve:

(a) Reference to previous correspondence
(b) Reference to data constantly consulted
(c) Inquiry of someone else

In a large organization, where there is a central filing system, all previous correspondence needed for the dictators should be obtained from the files before

the office opens in the morning. The mail should be opened early and letters referring to previous correspondence sent to the filing department at once. This will enable one of the file clerks, who is required to be on hand before the office opens, to look up the necessary correspondence and return the new correspondence with previous papers attached, ready for the dictators upon their arrival at the office.

It is assumed, of course, that the files and filing work are so organized that all correspondence actually is in the files where it belongs. When there is an individual filing system for each of certain executives, the secretaries take care of this preparation of the mail. Further reference to the subject of filing will be made in Chapter X.

Data constantly referred to, such as price lists, specifications, and so forth, should be readily accessible.

The securing of necessary information from others may involve personal visits, telephone calls, or written requests sent through the inter-office mail service. Personal visits are time-wasting and should be discouraged as far as possible. Telephone calls are permissible if haste is imperative, or when the person called is known to have the information within his reach.

Altogether too frequently, simply the convenience of the person doing the calling is considered. With this thought in mind it may prove helpful to use a "request slip," such as the one shown in Fig. 10.

To ☐ ADJUSTMENT
☐ "AS HAD"
☐ BOOKKEEPING
☐ FILING
☐ MAIL
☐ ORDER DIV.—G. O.
☐ TRANSCRIBING
☐ TRACKING

WANTED:
☐ At once
☐ S. A. P.
☐ Today
☐ By .....
☐ Before .....
☐ When ready

Please get the material or information checked below pertaining to the attached. Return with information requested to
☐ M. L. Doty ☐ E. M. Robinson ☐ A. L. Matheny

"AS HAD" DIVISION:

☐ Ratings
☐ Dun .....
☐ Brad .....

BOOKKEEPING DIVISION:

☐ Statement of Account in full
☐ Open Item Statement
☐ Copy of Last Statement
☐ Carbon of last Statement
☐ Statement for Wilber, to.....
☐ Special Statement. (as noted)
☐ Amount owing $.....
☐ Amount past due $.....
☐ Last pay't $.....Date.....
☐ Amount of Fall order $.....
☐ Paid on Fall order $.....
☐ Owing on Fall order $.....
☐ Past due on Fall order $. .....
☐ Amount of Spring order $.....
☐ Paid on Spring order $.....
☐ Owing on Spring order $.....
☐ Past due on Spring order $.....
☐ Amount shipped on
☐ Fall order $.....
☐ Spring order $.....
☐ Compare collection register
☐ How does he pay?
☐ Discounts ☐ Prompt ☐ Slow

MAIL DIVISION:

☐ Duplicate of Invoice

Date	Amount
.....	$.....
.....	$.....
.....	$.....
.....	$.....
.....	$.....

☐ Envelope received in
☐ Enclosure missing

FILING DIVISION:

☐ Previous
☐ File folder, this year
☐ File folder, last year
☐ Their letter dated.....
☐ Our letter dated.....
☐ Tickler dated.....
☐ Carbon of last Statement
☐ Spring order
☐ Fall order
☐ Special order shipped.....
☐ Mail order shipped.....
☐ Remittance slip rec'd.....
☐ Credit folder
☐ Latest financial statement
☐ Financial stmt. dated.....
☐ Order record card
☐ Spring order credit card
☐ Fall order credit card

TRACKING DEPARTMENT:

☐ Spring order
☐ Fall order
☐ Standing of order
☐ Shipper

ORDER DIV.—G. O.

☐ Check in Coll. Reg. and
☐ Return to me
☐ Send to Credit Files
☐ Change in Name
☐ Make Collection Register Sheet
☐ Check for accuracy

TRANSCRIBING DIVISION:

☐ Draft on Wilber for $.....
☐ Proof of claim for $.....
☐ Affidavit for $.....
☐ Extract for.....Dept.
☐ Please correct and Return

Customer ..... Date .....

FIGURE 10—REQUEST SLIP FOR INFORMATION

This slip has been used effectively by the credit department of a large wholesale house to get information from various departments. By sending such a slip through the house mail, the necessary information is secured promptly, without unduly disarranging, or otherwise interfering with, anyone's regular work. The double interruptions caused by desk workers visiting or calling up other departments in search of information are thereby avoided. Those using this particular slip, indicate the item desired, the department having such information, the person wanting it, and when wanted. The department receiving the slip through the inter-office mail looks up the information and returns it through the same channel.

It is a good plan to dictate letters as the first duty of the morning. The advantages of early dictation, aside from giving the stenographer time to transcribe her notes properly and get letters mailed early, are that both dictator and stenographer are in condition to work. Their minds are clear, and there usually are few interruptions at this time of the day. Consequently, considerable ground can be covered in a relatively short time. When dictation is delayed, other duties arise which consume the time. Interruptions by visitors, telephone calls, and conferences are likely to occur. Where one stenographer is serving several dictators, some delay is unavoidable. This difficulty can be minimized to a great extent by establishing a scheduled time for each dictator.

6. *Dictating machines.*—The function of the dictating machine is to get spoken thoughts typewritten without the necessity of first writing them in shorthand. The dictator talks into a speaking tube which carries his voice to a wax cylinder. After the dictation is recorded, the dictated cylinder is moved to a reproducing machine on the desk of the transcriber. After the transcription is completed, the cylinders are put on a shaving machine, which removes a thin layer of wax and prepares each cylinder for a new impression.

An indication device is provided with the dictating machine enabling the dictator to note, on a special form carried on the machine, any corrections he may desire, and to indicate the length of each item he has dictated. It also is possible for a dictator to listen to what he has dictated, by moving a lever which sets the machine for reproducing the voice through the speaking tube.

7. *Advantages of dictating machines.*—The dictating machine always is immediately available to the dictator. He can dictate at his own convenience without the loss of time involved in waiting for a stenographer. The dictator may talk as fast as he wishes, and dictate before or after office hours, or even at home. Furthermore, the immediate availability of the dictating machine makes it possible easily to get into typewritten form material which he would like to have typewritten without troubling to call a stenographer. Instructions, suggestions,

and current memoranda are samples of this type of material.

When a dictating machine is used, the stenographer is not interrupted by requests to take dictation in shorthand. She saves the time which ordinarily would be devoted to writing shorthand. As a result, a greater volume of work can be accomplished. The work can be better organized because a great many interruptions are eliminated.

In an office where the typewriting is centralized in a single department, the increased volume of work that can be accomplished by transcribing from wax cylinders makes it possible to reduce the cost of producing typewritten material. The same volume of work may easily be turned out with a smaller office force.

In a decentralized office in which each dictator has his own private secretary, the dictator is able to pass more of his detail work to his secretary, if he uses a dictating machine. The primary purposes of installing dictating machines in a decentralized office are to save the dictators' time by making it possible for them to dictate without delay, and to add to the value of the secretaries by releasing more of their time for work other than correspondence.

8. *Overcoming delays in dictating.*—The very convenience of dictating machines, however, makes a scheduled time for dictation all the more desirable, to avoid congestion in the transcribing department later in the day. Such congestion, resulting in de-

layed work, overtime, or hurried work, can be avoided by a little careful planning. Clean-shaved cylinders are necessary. The quality of shaving always should be determined by inspection. An automatic shaving machine will enable the transcribing department to obviate any difficulties from this source. Cylinders that have become cracked or too thin should be scrapped.

The tone of voice of the dictator is all-important. A high pitch is distressing to the transcriber; a very low voice is heard with difficulty. A soft voice does not register; a loud one loses quality. Best results are obtained by speaking just as one ordinarily speaks in using the telephone, that is, in a moderate volume, at a pitch a little lower than normal, with clear enunciation, and at a normal rate. The dictator can check on the quality of his dictation by listening now and then to what he has said.

The dictated cylinders should be delivered to the transcribers either through the inter-office messenger service, or by arranging to have a boy call at all dictators' desks at stated periods—hourly or half-hourly, according to the volume of dictation handled in the office. In the same way, fresh cylinders are supplied to the dictators.

9. *Organizing stenographic service.*—In building up an efficient stenographic department, it is necessary, first, to estimate carefully the amount of stenographic work to be done, taking into consideration the number of people in the office who require steno-

graphic service, and the volume of incoming mail each day. The time of the month, the season of the year, and even the day of the week usually have an effect upon the quantity of stenographic service required. Monday, Wednesday, and Friday in most cases are heavy days—Monday and Wednesday because of the heavy incoming mail, and Friday because at the end of the week there is a tendency to "clean up" any work that has been pending. This clean-up period often extends into Saturday morning. In an office that is well organized and well managed, however, Saturday morning is the lightest period of the week. It should be a day of planning and of preparation for the coming week.

The second factor in organizing the stenographic department is to find out how many workers will be available to do the required amount of work at any time, and to determine the capacity and degree of competency of each worker.

The third factor concerns assignment of work to individual operators. Before assignments are made, the competency of the operators and the amount of work already ahead of each one must be taken into consideration. All assignments should include necessary directions for doing the work, and as close an estimate as possible of the time the job will take for its completion. The head stenographer should keep a chart that will show the kind of work assigned, to whom assigned, the time it is assigned, the quantity, the probable time of completion, and the work that

is ahead of each operator. With this information on hand, the head stenographer will know immediately to whom the next assignment should be given. In assigning stenographers to take the dictation of certain dictators, consideration should be given to any specific requirements or peculiarities of these dictators. As a rule, however, it is desirable to employ as many all-round stenographic workers as possible.

The fourth factor deals with the training and instruction of the members of the group in the standard practices of the company. The "one best way" of doing work should be ascertained, analyzed, developed, and standardized. Such points as the proper letterhead to use, the set-up of the message on the letterhead, the style of paragraphing, spacing, indentation, spelling, and so on, are covered in these standard-practice instructions. The form in which such instructions are presented may range from a few mimeographed sheets to an elaborately-printed manual for transcribers, containing as a part of its information the technical terms used in the company's correspondence. It also may contain the shorthand outlines for technical terms frequently used. The effectiveness of this material lies not so much in its elaborateness as in its careful preparation, together with the continued coaching and supervision that are necessary to assure the absorption and use of the ideas by the stenographic force.

10. *Central stenographic department.*—Whether stenographic work is concentrated in a central steno-

graphic department, or scattered throughout the various departments of the company, the same results are desired, and the same principles apply that have been discussed up to the present point in this chapter. The decision to centralize may be determined somewhat by the size of the organization.

The outstanding advantages of a centralized department are:

(a) The grouping of specialists
(b) The consequent increase in proficiency
(c) The greater ease of supervision and control
(d) The relief of department heads from the necessity of supervising functions in no way unique to their departments

11. *Organization of duplicating service.*—The duplicating work in an office can be organized to distinct advantage, especially if it is done in any great quantity, or if more than one type of duplicating device is used. The first step in organizing this work is to determine the duplicating needs of the business and the existing method of meeting such needs. Bulletins, price lists, instruction sheets, circular letters, and so on, are some of the items that make up the duplicating work of the average office. Speed and accuracy in getting out material of this kind usually are considered of more importance than the appearance of the work. An office boy or girl often is charged with the responsibility of running off some copies in his or her spare time, or whenever the work needs to be done.

The nature of the material duplicated, the quantities required, and the use to which the material is put are factors to be weighed carefully. There are several methods of duplicating available, each having its own field for which it is best fitted. Some devices are limited in their output both as to quantity and speed of production. Others are almost unlimited. Some methods produce better looking work than others. If speed is a prime requisite, the rapidity with which the first copy can be produced and subsequent copies run off is of first consideration.

12. *The "hektograph."*—For speed in preparation, the hektograph duplicator has many advantages. The most common form of the hektograph is a machine having a gelatin roll stretched over a flat surface. A "master copy" is made with special ink on white paper and then laid face down on the flat gelatin surface. Thus the special ink is transferred from the paper to the gelatin. A blank sheet of paper, placed on the gelatin surface, will absorb enough of the ink to make a perfect copy. From forty to two hundred copies can be made at one run on the hektograph, if suitable paper is used. A hard-surfaced bond paper is best for the master sheet, and a smooth-surfaced paper for the copies. Master sheets may be prepared with specially-made pencil, ink, typewriter ribbon, or typewriter carbon.

13. *The "mimeograph."*—Where more than fifty to a hundred copies are to be produced, the stencil duplicator, such as the "mimeograph," will be found

very satisfactory, especially if a self-feeding device is used. The stencil, a specially-prepared paper, is cut on a typewriter, or by hand, through the use of a stylus. The cut stencil is stretched over the large drum of the machine, which is equipped with a cloth pad containing ink. The ink is pressed through the stencil, as the drum is rotated. This produces the copy.

The excellence of the work depends upon the kind of stencil used, the care with which the stencil is cut and stretched on the drum, the cleanliness of the machine, and the kind of paper used for printing the copies. A slightly-absorbent paper makes very satisfactory copies, the ink drying quickly and permitting rapid operation. Fine work may be done on hard-surfaced papers, but extreme care is necessary to prevent offsetting and blurring. For this purpose, an interleaving device is desirable.

Formerly the output of such a stencil duplicator was limited by the kind of stencils used. The introduction of a specially prepared, practically indestructible stencil has widened the field extensively. If properly preserved, the stencil can be used many times to reproduce the same copy. The preparation of the stencil consumes little time, and the printing is rapid.

14. *Facsimile typewritten work.*—For facsimile typewritten work, the type-and-ribbon duplicator, such as the "multigraph," is used, especially where more than a few hundred copies are required. This

machine usually is not economical for the production of less than one hundred copies (except for a very short letter or form) since the time of setting up type is somewhat greater than the time of preparing for either the hektograph or stencil process. On the other hand, the work is of excellent appearance. The invention of a rapid-composing machine has speeded up the preparation of the machine for printing. The printing, on a machine of this type, is accomplished by pressing the type against an inked ribbon, back of which rests the sheet of paper that receives the impression.

Original typewritten letters, containing the same copy, but with different names and addresses inserted, may be obtained by means of an automatic-electric typewriter which uses a perforated stencil similar to a piano-player roll. The cutting of the stencil is the most difficult part of the operation. It takes from one to two hours to prepare the machine for use. Once the perforated stencil is made, however, the machine will turn out typewritten originals at a rate equivalent to the output of six competent typists. The stencil may be preserved and used indefinitely.

Where a great many typewritten originals are necessary, this machine is economical to use. The manufacturers of the automatic-electric typewriter operate service stations for customers who do not wish to purchase machines. Offices of medium size often turn to these service stations for assistance rather than purchase equipment.

15. *Miscellaneous duplicating processes.*—Occasionally an office must produce circulars, and other duplicated material, in color. The so-called "multicolor press" is one of the appliances used for this purpose. In the average office, however, it probably will be found expedient to send such work to a regular printer.

Devices like the "cameragraph," the "rectigraph" and the "photostat" are now being used rather extensively where facsimile reproduction is required. It is not difficult in the larger cities to find concerns that specialize in doing work of this nature. The purchase of the equipment for office use is justifiable only in very large establishments where numerous facsimile copies are required day after day, but even the small office can avail itself of the helpful and low-priced services of the professional "service station."

16. *Considerations of vital importance to the administrator.*—The product of the stenographic and duplicating department cannot be considered as well done unless it correctly represents the company and the company's standards. Each letter that goes out from the office may be said to carry this message to all who see it: "I represent my company. If I am neatly dressed, it is because the company wants all of its products to be representative of its standards. If what I say is clear and easy to read, it is because the company realizes that those who read me are busy people, and have no time to waste on meaningless phrases or ambiguous sentences."

No company would regularly send out salesmen who were not carefully dressed and prepared for their tasks. One call from a slovenly looking salesman might completely destroy the confidence of a customer whom the company had been assiduously cultivating. But for every single call that a salesman makes, the customer may receive ten or more letters. How important it is, therefore, to see that all letters are carefully dressed and properly prepared to represent the company's standards!

REVIEW

Name the important factors that must be considered in deciding on policies and methods for stenographic work.

Outline the requirements for the three grades of stenographers and two grades of typists, as developed by the Boston Chamber of Commerce.

Explain how the dictator can assist in facilitating stenographic work.

Outline the methods by means of which the dictator's work can be efficiently organized.

Explain the uses and advantages of the dictating machine.

Describe the methods by which stenographic work can be efficiently organized.

List and describe briefly the equipment and methods used for the duplicating of letters, forms, lists, reports and other office records and papers.

CHAPTER IX

MAILING

1. *Importance of the mailing department.*—The efficient operation of an office is often determined largely by the effectiveness of the mailing department. If the office staff is held up in starting its daily routine, because of the failure of the mailing department to distribute the morning mail on time, the work of the entire day will be retarded. If the mailing department does not get the outgoing mail to the post office in time to catch the mail trains, serious delays in delivery will result. Such delays are particularly serious if the mail arrives too late for steamship sailings. For such reasons, the handling of incoming and outgoing mail by the mailing department may well be given attention before the task of improving any other department is undertaken.

As soon as all departments are able to count on getting their mail at definite times, the basis of an office schedule is established. The various operations can then be planned to fit in with the scheduled arrival of mail. The large mail-order houses have adopted the policy of determining the volume of daily work by weighing the sacks of mail as they arrive. For

instance, Montgomery Ward & Company has found, from long experience, that there are, on an average, about thirty orders to each pound of mail. Thus, ascertaining the number of pounds of mail received in the first delivery of the morning enables the managers to compute the number of orders to be handled that day, and to plan their schedules accordingly.

2. *Handling incoming mail.*—There are two main divisions in the work of the mailing department. One is the handling of the incoming mail, the other is the handling of the outgoing mail. The principal steps in handling incoming mail are:

(a) Getting the mail from the post office
(b) Sorting the mail
(c) Opening the mail
(d) Distributing the mail to the proper departments

If each day there is a considerable volume of mail in the first delivery, or if the letter-carrier does not deliver the mail until after, or even just before, the office opens, arrangements should be made to have some responsible employee of the company call at the post office to get all the mail that has been sorted there for delivery to the company. This mail should be in the mail-opening department some time before the office is opened for work. Arrangement for collection by a messenger may be made with the post office superintendent, and the mail may be called for as early as desired. The post office should be informed of the time when the messenger will arrive

for the mail, and a positive identification of the representative of the company should be given.

When the mail arrives at the office, all personal mail should be separated from the company mail. Then the company mail should be

(a) Opened
(b) Read to see to what department, or to which individual, each letter goes
(c) Delivered to the proper individuals

The general trend now seems to be toward the practice of opening all mail addressed to the company, regardless of whether or not a particular department is indicated on the envelope. This is in line with "functional organization," in that the mailing department is better equipped than other departments to perform this special activity. Where a letter requires the attention of more than one department, the mailing department can see that it is properly routed, without interfering with the routine of the office. Copies can be made if necessary, so that the same message can be turned over to all departments affected at approximately the same time.

3. *Opening mail.*—The saving of time through the use of a letter-opening machine is very great where more than a hundred letters are received in the first mail, especially if the mail is to be read by the clerk who opens it. The operations involved in mail opening are important. After the envelopes have been

slit, and the contents removed, the envelopes should not be destroyed. They should be pinned to the enclosure, for subsequent reference, if necessary, by the department ultimately handling the message. Letters containing money, checks, money orders, or other cash items, usually are laid in a separate pile for the attention of the cashier. Greater progress is made in removing the contents of envelopes if no reading is attempted until this job is finished, or at least until a sufficient amount of mail has accumulated to keep the mail reader busy and "ahead" of the openers.

After this operation of opening the mail has been completed, and before the letters are read, each piece should be stamped with the date and time received. This step is important. Several types of time stamps are available for the purpose, ranging from a rubber stamp with an adjustable dial to an automatic electric time clock.

In connection with time-stamping, a suggestion concerning mail for the credit department may be helpful. It is good practice, when a financial statement is received from a customer, to have the mail-opener put his initials on the back of the statement and on the envelope, thus providing *prima facie* evidence of the receipt of that particular statement in that particular envelope. Such *prima facie* evidence can be used against the sender, on the basis that he has used the mails to defraud, in case a business statement thus received is false or misleading.

4. *Reading mail.*—The skill and intelligence with which mail reading is done do not depend so much on the reader as upon the care with which the reader's instructions have been prepared. If possible, the same readers should take charge of the same type of mail each day. Nearly all the mail received by any firm falls into well-defined classes. When these classes have been determined, the few odd letters which do not come under any of the stated classifications may be referred to the manager for decision as to handling. This procedure conforms to the application of the "exception principle" in management. The chart in Fig. 11 shows the instructions given to the mail reader by a large wholesale house, for the correct disposal of each kind of material that he handles.

The equipment used in reading and classifying incoming mail is also important. The old-fashioned method of placing letters in piles may be satisfactory where the manager reads all the mail himself, or where only a few letters are received. A better way, however, is to use sorting racks, which provide one compartment for each of the departments receiving mail. The name of the department appears on the compartment in letters large enough to be easily read. Sometimes a slip is mounted inside each compartment showing precisely what mail should go there. This simple device saves time on the part of the mail reader when he needs to check up a temporarily forgotten detail.

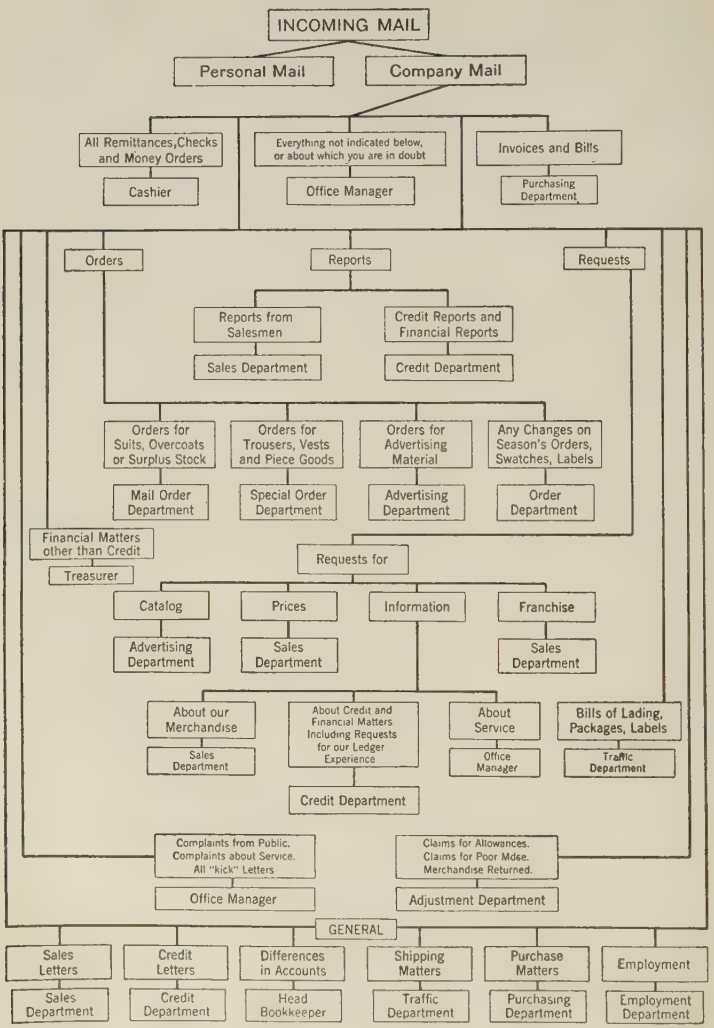


FIGURE 11—ROUTINE FOR DISTRIBUTION OF MAIL IN A MAIL-ORDER HOUSE

The administrator should make certain that the mail readers are familiar with the following points:

(a) Is there a reference in this letter to previous correspondence? (If so, the letter should be placed in the filing-department bin for attention by the proper clerk.)
(b) Should this letter go to more than one department? (If so, a red pencil should be used to mark the departments to which it is to be sent and the letter should be put in the stenographic-department bin.)
(c) To which department should the letter go? (Familiarity with, and practice in using, the standard-practice instructions will determine its disposition. If there is any question as to the proper department, the letter should be put aside temporarily for the attention of the manager, or for the later attention of the reader himself.)

The following method, which tends to eliminate all unnecessary delays in handling letters intended for more than one department, has proved very satisfactory. The mail reader indicates with red pencil the departments to which the different parts of the letter are to go, and also which department is to receive the original letter. A typist, designated for that purpose and fully instructed in the procedure, prepares as many "extracts" as may be needed on forms provided for the purpose. These extracts show:

(a) Who made the extract
(b) The department for which the extract is intended
(c) From whom the letter was received

(d) The part of the letter affecting the department
(e) The department to which the original letter has been sent. Thus, when the department receiving the extract finds it necessary to see the original letter, the original can be traced easily

5. *Distributing mail promptly.*—One other detail completes the task of handling the morning mail. This mail should be delivered to the designated departments before the office opens. Every minute of delay, after the office opens, is multiplied by the number of people in the department whose work is delayed by late delivery. If sixty people are delayed, every minute means a delay of *sixty minutes,* or an entire hour, of working time.

On some days the mail may be unusually heavy. Consequently, it may be difficult on these days to have it opened, read, and distributed before the office opens. The tendency in many mail-opening departments is to wait until *all* the mail is sorted before delivering *any* of it. This tendency should be overcome by definite instructions to the effect that the first mail distribution must be made at a stated time before the opening of the office. It is more important to let the departments have some of their mail at once, than to have their clerks receive all of it at one time.

6. *Handling outgoing mail.*—The handling of outgoing mail usually should be done by a central mailing department. It is possible, under such circumstances, to obtain better control over stamps,

better delivery to the post office, and more expeditious handling of the problem in general.

Provision must be made for collecting the letters to be mailed from the different departments. Working space and facilities for folding, enclosing, sealing and stamping the mail also must be provided. If there is considerable correspondence with certain salesmen, sorting bins should be provided to enable the clerks to gather and mail in the same envelopes all communications to the same individual. The sealing and stamping of a large volume of outgoing mail are most effectively handled by mailing machines. These machines perform many operations formerly done by hand. For instance, a machine that will gather enclosures, stuff them in the envelope and then seal the envelope, leaving only the stamping to be done, is available for use in connection with large "circular" mailings.

7. *Obtaining efficient postal service.*—The volume of outgoing mail determines largely the extent to which the management can profitably provide labor-saving equipment and expert help. The employment of an experienced mail clerk, on general principles, is a distinct economy. He knows how to "make" the best mail trains, how to coöperate with the post office in getting the best and fastest service, and how to take advantage of all the postal facilities to secure quick service at low cost. Such points as mail classification, postage rates, geographical sorting, proper weighing, and delivery to the right postal station

are matters of technical knowledge, requiring competent handling to obtain the most satisfactory results.

If the office handles a large amount of registered mail, the experienced mail clerk knows how to speed up what is otherwise a slow process, by taking care of all the details of registering in his own mailing department rather than at the post office. He can supervise the proper preparation of all kinds of mail—letters, packages, "specials," and so forth—to comply with the detailed, and sometimes complicated, requirements of the postal authorities. He knows how to take advantage of bulk mailing—a money-saving process.

8. *Records necessary.*—Certain records are desirable because of the fact that the volume of mail is a factor in determining the volume of work going through the office. For incoming mail, a record of the number of pieces received on each delivery, and the time of delivery, will serve most purposes. Some office managers require the clerk to show also the time that each batch of incoming mail is distributed to departments, with the reasons for any unusual delays.

The number of pieces of outgoing mail is easily ascertained from the counting device on the mailing machine. The stamp record is an important one, because of the temptation for abuse and perhaps theft. Precautions should be exercised to prevent placing this temptation in anyone's way. The fur-

nishing of proper safeguards for the disbursement of stamps is desirable in any office. The use of "permit printing" instead of stamps has a distinct advantage, in that it eliminates the handling of large quantities of stamps.

9. *The administrator's problem.*—The greatest emphasis, in connection with the handling of mail, is laid on the time element—getting the mail from the post office early enough in the morning to permit it to be handled properly that day, and getting outgoing mail to the post office early enough at the end of the day to permit it to receive the benefits of the fast mail trains and mail ships. Railroads and steamship companies vie with each other in developing and operating fast mail service. The government subsidizes air mail lines. All of this service is provided so that business messages may be carried more quickly to their destination. The alert administrator will take advantage of these facilities. Maintaining schedule time is important throughout all business operations, but in no one place is it of greater importance than in the mailing department.

REVIEW

State the reasons why the mailing department is of so much importance.

Outline the methods of handling office mail up to the time when it arrives at the letter opener's desk.

Describe the methods of opening, reading, and distributing mail in the most efficient manner.

Explain the manner of handling outgoing mail.

Outline the ways in which the mail clerk can obtain the most efficient postal service.

List and describe the records that should be kept by the mailing department.

Describe briefly the steps involved and the methods employed in handling incoming mail in your own or some other office.

CHAPTER X

FILING

1. *Importance of filing service.*—The importance of filing service is measured by the extent to which the administration may decide that it is necessary to keep letters and papers for ready reference. Strange as it may seem, the filing of correspondence is of relatively little significance in a large mail-order house like the one to which we have already made reference in Chapter IV. It has been found that correspondence may safely be returned to the customer with the request that the papers be sent back to the company if there is occasion to refer to the order again. On the other hand, a life-insurance company, whose files and records must of necessity cover the lifetime of many policyholders, considers its files to be of the utmost importance.

Usually, a business concern must maintain a filing system of considerable elaborateness. Just what the company's needs may be, in each instance, constitutes one of the major problems for the investigation of the administrator. An inadequate system is sure to result in confusion, with consequent loss of time and money. But it is an easy matter to insist upon too high a degree of elaborateness in the filing system,

and thus waste money. Every expenditure should justify itself by the resultant savings.

For most offices, the filing problem resolves itself into finding the answers to these few questions:

(a) What shall be filed?
(b) What is the best way to file it?
(c) How long shall the filed material be kept?
(d) How shall the files be operated?

2. *What to file.*—The first question, "What is to be filed?" can be answered partially by making a complete list of the items to which reference unquestionably will be made. This particular list should be made as specific as possible. Doubtful items should be placed on another sheet, called the "conditional" list. Both lists, incidentally, are subject to periodical revision, probably once or twice a year, just prior to "transfer periods." These periods will be discussed later in this chapter.

Some of the items that the first list is likely to contain are customers' original orders, contracts, paid invoices of accounts payable, paid canceled checks, instructions, correspondence of a contractual nature, and certain reports. All correspondence and papers about matters still "open" should be preserved. The desirability of keeping such items as sales-ledger remittance slips, duplicate order sheets, duplicate purchase orders (after material has been received and paid for), duplicate copies of customers' invoices, triplicate bills of lading, cash charge slips, credit memoranda, and ordinary correspondence of no more

than current interest, for any considerable period of time, is open to question. If items are to be kept for stated periods, and then destroyed, the length of period should be stated on the list, and provision made for destruction at the time indicated.

The main reason for destroying unnecessary papers is to save the labor, equipment, and space necessary to store them. In many businesses, references to papers more than a year old are so rare that it is doubtful whether the business is justified in keeping them. Of course, this does not mean that everything a year old should be destroyed, but it does mean that careful reasoning should be employed in determining what to keep and what to throw away.

3. *Keeping material of permanent value.*—Those papers that are kept permanently may be filed separately from other papers, in permanent cabinets. Such material is usually homogeneous, and segregation facilitates the destruction of less important items when the appropriate time comes.

The time to decide whether or not a letter or paper shall be kept is before it is filed. With definite instructions, the head file clerk can easily perform this duty, referring doubtful cases to the office manager, or following the general rule, "When in doubt, file it." Useless material never should reach the files. On the other hand, in connection with determining what shall and what shall not be filed, a plan for "central inspection" is more easily controlled than a plan that permits several individuals to have the

power of decision. Abuse of this power always is difficult to check.

4. *Correspondence files.*—Since correspondence is usually the most important item to be filed, it will be given special consideration in this discussion. It should be remembered, however, that the filing principles mentioned apply to the filing of any item—letters, checks, electrotypes, supplies, and all similar articles. The main purpose of filing, in all cases, is to preserve the item that is filed, to index it, and to put it away in such manner that when it is wanted it can be produced immediately.

Correspondence may be filed in several different ways. The choice of method will be governed by two factors, ease of filing and ease of finding. Modern filing equipment so greatly facilitates and simplifies the work of filing that the problem in most offices centers more on ease of finding. The final test of any filing system is whether or not it can produce the desired papers or items at the exact time they are wanted.

The four most common methods of filing correspondence are by:

(a) Name
(b) Location
(c) Number
(d) Subject

The first, second, and fourth methods use the simple alphabetical index, or some modification of it. The

third method uses an arbitrary scheme of numbers, as described later in this chapter.

5. *Filing by name.*—The advantages of filing a letter according to the name of the writer are apparent. When a letter of a certain date, written by J. B. Wallace, is wanted, it is a simple matter to ask for J. B. Wallace's letter of that date. With a simple alphabetical index, providing twenty-six places, one for each letter of the alphabet, the Wallace letter would be found under "W." The correspondence with this man may have been of such volume or importance that an individual folder has been required to hold it. This folder would be labeled "Wallace, J. B." and filed alphabetically under "W." As the correspondence with different concerns increases in volume, each division of the file may be broken up into subdivisions; e.g., "B" into "Ba to Bj" and "Bj to Bz," and so on. There is no limit to this subdividing. Some indexes have divided the alphabet into as many as 5,000 subdivisions.

There are real difficulties, however, with certain names that sound alike but that are spelled differently. "Snyder" has nearly forty different spellings. Others, like "Wight," "White," "Weight," "Wite," "Wieght," have from two up. These variations have led to the adoption of "filing by sound," in which names that sound alike are filed together, regardless of the spelling. The possible variations of different names have been given careful study, and filing equipment manufacturers are prepared to coöperate with

offices in solving filing problems of that nature. An administrator who faces a complicated filing problem should call upon someone with experience for advice regarding its solution.

One point related to the alphabetical index often is overlooked. Although any desired subdivision of the alphabet can be procured, the "expansion" of the existing files to that particular subdivision will require more cabinets as well as the readjusting of the present filed material to the new subdivision. For that reason, it usually is better to install the new index at the beginning of a new "filing period" than to try to transfer all the existing material to the new index.

6. *Filing by geographical location.*—Filing by location, "geographical filing" as it is called, means filing correspondence under the state and city in which the correspondent is located. In this system, the states are arranged in alphabetical order. Under each state, in turn, the towns and cities are arranged in alphabetical order. In some cases it may even be desirable to break up the states into counties, and the counties into towns and cities. Under the town, or the city, correspondence is arranged alphabetically, according to correspondents' names. The only difference between the two systems is the fact that in geographical filing all correspondence with concerns in the same city is in the same part of the files.

In deciding whether to use ordinary alphabetical indexes or geographical indexes, the administrator must decide precisely what he wants to find when

looking in the files. For instance, he must decide whether he wants to find the correspondence with customers in Dubuque, Iowa (one of whom may be J. B. Wallace), or the correspondence with J. B. Wallace, irrespective of his location.

If, in connection with business operations, the company has divided the country into territories, and if one correspondent has charge of each territory, geographical filing may be especially desirable. The reason is that it might be helpful to keep together the correspondence of those in each territory.

A cross-reference index of customers, arranged alphabetically and giving each customer's name and address, is almost a necessity with a geographical file. Such an index, which may be kept on 3- by 5-inch cards, will facilitate reference to the file of customers whose locations may have been forgotten.

Unless there are very good reasons for filing geographically, it will be found, as a rule, that alphabetical filing of correspondence by *name* is preferable.

7. *Filing by number.*—Filing correspondence, or anything else, by number is a very simple method. A cross-reference index, arranged alphabetically, is essential when filing in this manner. The file number is placed on the letter or paper and the latter is placed in the folder bearing that number. Finding is equally simple. From the alphabetical index the clerk ascertains the file number, goes to the file and picks out the folder bearing that number.

There are two possible disadvantages of numerical

filing. One is the ease with which numbers are transposed. Material filed under the wrong number is usually lost permanently. The other is the necessity of double work when either filing or finding. The index must be consulted each time.

The numerical system may consist of plain numbers, groups of numbers assigned by hundreds or thousands to specific fields (1 to 100, or 1 to 1,000 to one field, 101 to 200, or 1,001 to 2,000 to a second field, etc.), or it may be built up according to a decimal plan. The group plan is used more specifically for filing technical data, for library work, or in connection with accounting systems.

Often a combination of alphabetical and numerical indexing works out well. In such cases the numerical index is usually subordinate to the alphabetical arrangement, and serves as a check against the accuracy of the filing. Except where the numbers are connected with other records also (for example, policy numbers in an insurance company, or case numbers in an attorney's office), exclusively numerical indexes are little used for filing correspondence.

8. *Filing by subject.*—When filing by subject, either alphabetical or numerical indexes, or both, may be used to advantage. In a small subject file, an alphabetical arrangement of subjects may be made. In a large subject file, however, numbers are almost a necessity, to avoid useless writing and cumbersome handling.

The purpose of subject filing is to bring together, in one place, all material on the same topic. A list of the subjects on which material is to be gathered is drawn up, and one folder, or more, for each subject is provided. Correspondence may be filed by subject, if reference to the material by the correspondent's name is of minor importance as compared with the convenience of having all material on the same subject together. For example, in the real estate department of a large utility concern, the abstracts of title to real estate parcels might be made by the same title searcher, but they would be arranged according to localities, or owners, or projects. Correspondence about those same parcels would be filed with the abstracts, not by the name of the conveyancer.

On the other hand, if it is desirable to keep together all the correspondence of a particular firm or individual, the alphabetical index is used most advantageously. In fact, unless there is some very good reason for not choosing the alphabetical method, or some modification of it, good filing practice will almost invariably dictate the use of that method. It is likely to prove to be the most desirable and least troublesome. The various ways in which it is possible to file a letter are shown in Fig. 12 on the following page.

9. *Operation of the filing department.*—With the questions settled of what is to be filed, how long it is to be kept, and what method shall be used in filing

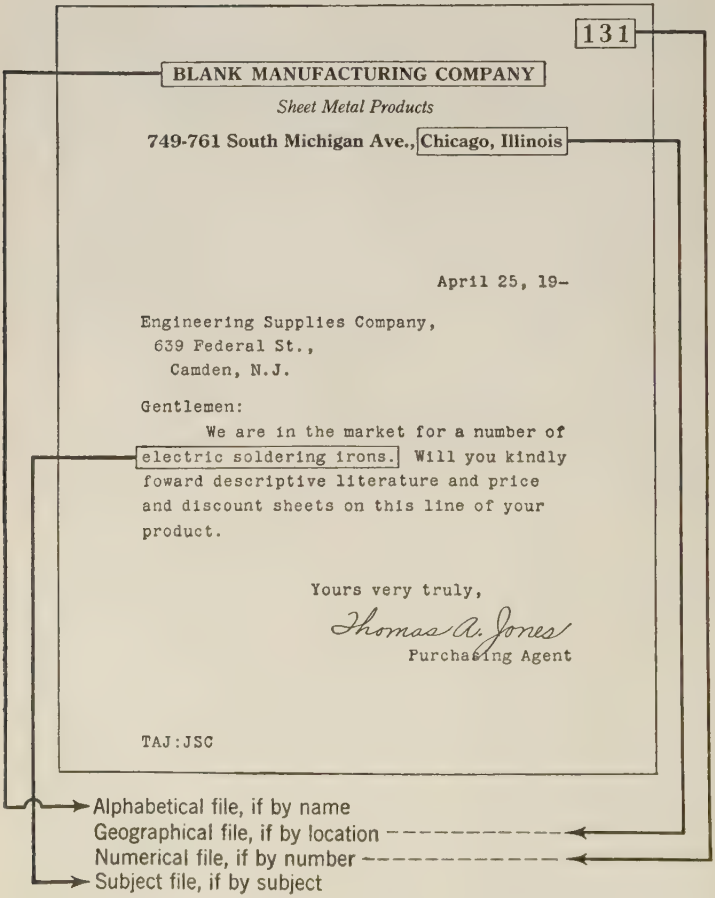

131
BLANK MANUFACTURING COMPANY
Sheet Metal Products
749-761 South Michigan Ave., Chicago, Illinois
April 25, 19-
Engineering Supplies Company,
639 Federal St.,
Camden, N.J.
Gentlemen:
We are in the market for a number of electric soldering irons. Will you kindly foward descriptive literature and price and discount sheets on this line of your product.
Yours very truly,
Thomas A. Jones
Purchasing Agent
TAJ:JSC
Alphabetical file, if by name
Geographical file, if by location
Numerical file, if by number
Subject file, if by subject

FIGURE 12—THE FOUR METHODS OF FILING CORRESPONDENCE

it, the next point to determine is the actual operation of the files. File operation involves:

(a) The equipment to be used
(b) The correct use of that equipment
(c) Organizing the filing routine
(d) Maintaining and supervising that routine

10. *Adequate equipment important.*—The equipment used in a filing department, above all things, should be suited to the purpose in hand. It should be of the correct size and easily operated—and there should be enough of it. For correspondence filing, full letter-size wood or steel cabinets are desirable with drawers that easily pull out and push in. A file clerk is paid for filing and finding papers, not for physical endurance as displayed by the number of times heavy file drawers have to be opened and closed daily.

All correspondence should be filed vertically, that is, on edge. For ease in filing and finding, and economy of space and energy, vertical filing has never been equaled. Four-drawer upright cabinets are preferable to three-drawer units, unless for some good reason the cabinet tops are to be used as counters. The four-drawer cabinet takes up no more floor space than the three-drawer, and it provides one-third more filing space. In connection with the purchase of filing equipment, the main point to remember is that cabinets cost less than the time of filing clerks, who will be obliged to waste time and effort if furnished with inferior or inadequate equipment.

11. *Filing accessories.*—Folders invariably should be used to hold correspondence. They keep letters and papers neat, clean, and in order. A medium-weight manila folder of good quality is desirable. Poor-quality folders tear, crumble, and fall apart. The folders should be stiff enough to hold a reasonable quantity of papers and not sag when placed on edge. One "miscellaneous folder" should be provided for every subdivision of the index, and one folder for every person, firm, or corporation for whom the company needs to file more than four letters.

Guides with indexed tabs should be provided, one for each index subdivision. The index should be subdivided far enough so that not more than ten or fifteen folders are in back of each guide. Lack of sufficient guides will slow down filing and finding more than any other factor except overcrowded file drawers.

Each file drawer should be labeled. The label should show what is in that drawer. If four-drawer cabinets are used, the two upper drawers should be kept for current correspondence and the two lower ones for transferred correspondence, as described later.

A preliminary sorting device will be found exceptionally useful. This device may take the form of a sorting tub, with guides labeled to correspond with the cabinet drawers, or a device like the "sortergraf," which has a number of overlapped pockets, labeled like the cabinet drawers, and sliding on rollers. The

value of a preliminary sorting device is twofold. It arranges the correspondence in a manner to simplify the final sorting and filing, and it provides a temporary resting place for material to be filed—so classified that any desired paper can be located quickly. A competent filing supervisor, therefore, will see that correspondence is placed in the sorter just as quickly as possible after its receipt.

Tables to work on, chairs for use at the tables, and low stools for easier access to the two lower drawers of the filing cabinets are among the necessities of the department. If a manager who considers these facilities unimportant were obliged to work in a filing department just one day, his filing clerks would have no difficulty thereafter in getting the required equipment.

12. *Routine of filing department.*—The filing routine involves the following steps:

(a) Getting papers to the file department
(b) Getting them into the file cabinets
(c) Getting them out of the file cabinets
(d) Getting them back to the files

Letters and papers from all sections of the office and, in mercantile and manufacturing concerns, from different departments, must be put in the files. To get them safely to the filing department involves the responsibility of determining by whom, and when, they shall be taken there.

Each department having material for the files should be provided with one or more boxes or baskets

in which to place this material for collection. When there is an inter-office mail service, the papers should be collected and brought to the files according to a regular schedule. If no such service is in operation, the material may be collected by a file clerk or by the office boy. It may be feasible for the department concerned to assume responsibility for the delivery of material to the filing department. In any case, it should be borne in mind that the primary responsibility rests with the filing supervisor. His wishes should be given full consideration when a plan of procedure is arranged.

As letters arrive at the files they should be inspected by one of the clerks, preferably the supervisor, to determine:

(a) Whether the letter has received attention and really is ready for filing
(b) Whether the general regulations demand filing it or destroying it
(c) If to be retained, under what index classification it is to be filed

If the inspector concludes that the letter has not received attention and therefore is not ready to be filed, he should forward it to the office manager, who will refer it to the proper department head. Letters which the inspector believes need not be kept, may either be destroyed or forwarded to the office manager for his inspection and final decision. Carefully-thought-out rules should govern the procedure.

Each letter ready for filing should be marked with

the proper classification. Usually this is done by underlining the name, or symbol, under which it is to be filed. All letters so classified and marked should then be placed in the preliminary sorter, and eventually in the file cabinets.

13. *Scheduling the work of the filing department.* —The filing department can be operated readily according to a definite schedule. Such a schedule is of considerable advantage, particularly if more than one person is engaged in filing. Where this plan is followed, the work of each clerk should be carefully laid out, according to his ability, capacity, and intelligence. Definite times should be set for handling the different kinds of work. The supervisor, at regular intervals, should check the schedule with the amount of work on hand, to assure himself that work is not accumulating more rapidly than it can be handled.

The third step in the filing routine is finding and delivering material that is in the files. If the letters have been filed properly, there will be no difficulty in finding them again. Requests for filed material should be subject to fairly definite restrictions. Only those persons officially authorized should be permitted to withdraw material from the files. Since the filing supervisor is responsible for the safekeeping of all material, once it has reached the files, he should know:

(a) Who is calling for material
(b) That the material called for can properly be given that person
(c) That a record is made indicating where the ma-

terial goes, by whom it is taken, by whom it is supposed to be used, and when it was taken

Such a record is absolutely necessary in any filing department. Its importance cannot be overemphasized.

14. *Protecting filed material.*—The simplest device used in this connection is a request slip called the "requisition for filed material." Anyone desiring filed material makes out the requisition showing what is wanted, who wants it, and the date taken. This requisition, signed by someone in authority (usually the department head or a department supervisor) gives the filing supervisor authority to deliver the requested papers. This requisition also serves as a record of papers withdrawn. It may be placed in the file drawer in the place of the papers taken, or preferably in a follow-up file.

As a rule, papers should not be out of the files more than a day. Some offices require papers to be returned at night, even though they are to be taken out again the following morning. Whether or not this measure is justified in a given office depends, of course, upon the circumstances and upon the good sense of the office manager.

No plan of operation should be employed simply because others use it. If a certain method cannot stand on its own merits, it is not worthy of use. As far as the use of a requisition for filed material is concerned, it is on a plane with stock requisitions, purchase requisitions, cash charge slips, and other

similar devices for procuring items for which proper authority and responsibility must be shown.

15. *Transferring the files.*—Most offices "transfer" their correspondence at stated times—annually, semiannually, or quarterly, as may seem desirable. The decision usually results from an inspection of the file cabinets, or from a demonstrated need for additional filing space. Frequent reference to filed correspondence seldom continues more than three months.

By transferring inactive material, the files are kept cleaner, less papers are handled, and less space is needed for filing cabinets. The transfer operation consists of providing a new set of folders and indexes, and starting on a certain date to file in the new set, at the same time ceasing to file in the old. The new set is referred to as the "current files," and the old as the "transfer files."

Where four-drawer cabinets are used, the two lower drawers may be used for the transfer files, and the upper two for current files. When the next transfer date arrives, the material in the lower section is removed and either placed in cardboard transfer boxes or wrapped up in bundles, plainly marked, and stored away. It is unnecessary to buy new guide cards if modern indexes are used, because the tabs of the miscellaneous folders act as indexes to the transferred material and the guide cards are retained in the current files, thus to be used over and over again.

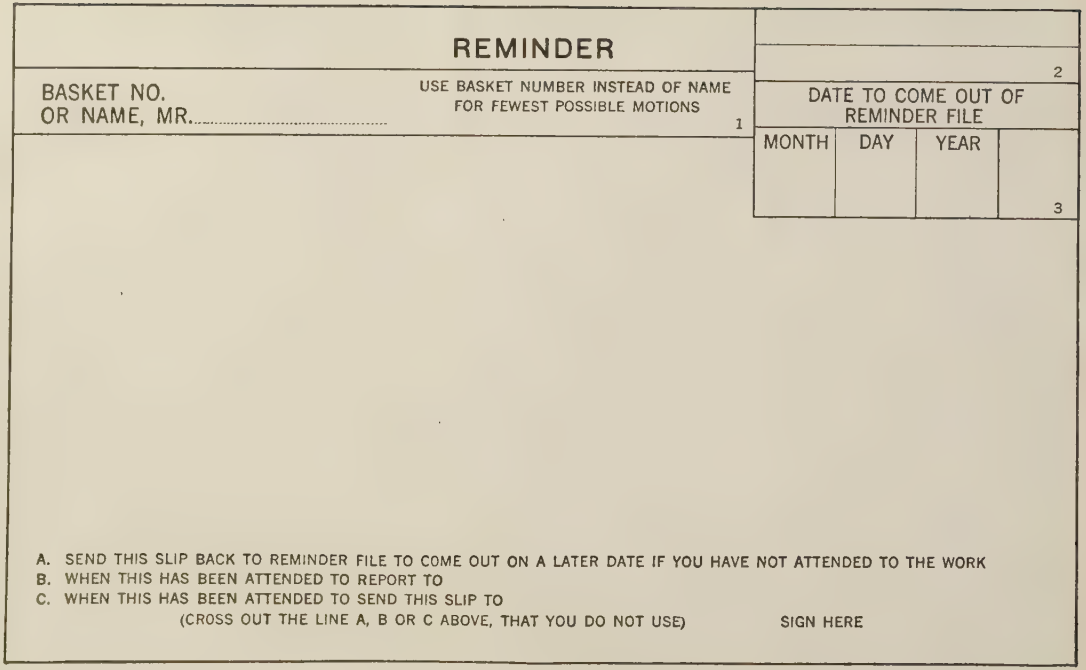

REMINDER
2
BASKET NO.
OR NAME, MR.
USE BASKET NUMBER INSTEAD OF NAME
FOR FEWEST POSSIBLE MOTIONS
1
DATE TO COME OUT OF
REMINDER FILE
MONTH
DAY
YEAR
3
A. SEND THIS SLIP BACK TO REMINDER FILE TO COME OUT ON A LATER DATE IF YOU HAVE NOT ATTENDED TO THE WORK
B. WHEN THIS HAS BEEN ATTENDED TO REPORT TO
C. WHEN THIS HAS BEEN ATTENDED TO SEND THIS SLIP TO
(CROSS OUT THE LINE A, B OR C ABOVE, THAT YOU DO NOT USE)
SIGN HERE

FIGURE 13—"TICKLER" OR REMINDER BLANK

16. *Central follow-up file.*—Another way in which the filing department can be of vital service to the office is in the operation of a central "tickler," or follow-up file, for the whole office. Anyone having matters to be taken up at a later date may send a memorandum to the files, and then practically forget about it, confident in the assurance that the matter will be brought up on whatever date was indicated on the memorandum. This service relieves the various departments of a filing function, and places the responsibility in the hands of experienced clerks.

In Fig. 13 is shown a tickler blank. Ticklers that are to come out weekly, or monthly on a definite date, are usually prepared on cards, while those of a temporary nature are written on paper blanks. These blanks are filed in heavy folders or between guides, indexed according to months and days of the month. Each day the tickler clerk removes and distributes those due out that day. Jobs that otherwise would be neglected or forgotten are thus called to mind automatically under such a plan.

REVIEW

List the four factors involved in the filing of office papers and records.

State the methods most effective for determining what is to be filed.

Describe the four methods under which correspondence may be filed and list the advantages and disadvantages of each.

Name the factors involved in efficient file operation.

Describe four filing accessories that are special utility.

Outline the methods of developing the routine and scheduling the work of the filing department.

State how material can be protected from loss when requisitioned from the files.

Explain the operation of a "tickler" system.

Outline briefly the methods employed to get material into the files in your own or some other office. List the types of equipment and the accessories used in the filing department.

CHAPTER XI

CONTROL OF STATIONERY AND SUPPLIES

1. *Factors involved.*—The effective handling of stationery and supplies involves the following factors:

(a) Determining what is required
    (1) Describing accurately the item and quantity
    (2) Incorporating the description in standard specifications
(b) Procuring the material
    (1) Getting prices
    (2) Placing the order
    (3) Getting delivery
(c) Storing the material until wanted for use
    (1) Providing a storeroom
    (2) Arranging the storeroom
    (3) Recording material on stock records
(d) Issuing the material as required
    (1) Providing for properly authorized requisitions
    (2) Entering material issued on stock records
(e) Replenishing the supplies when depleted
    (1) Knowing when a new supply is needed
    (2) Taking steps to get it

2. *Materials required.*—In the case of nearly every item of supplies, there is usually one brand, or one size, grade, or style, that is better suited to the

purpose than any other. When that one best type has been determined by experience, or experiment, it should be selected as a standard. An exact description of the item should then be written so that when subsequent purchases are to be made the purchasing department can place its orders on the basis of these standard specifications.

A standard should be set also, if possible, fixing the quantity to be ordered. This quantity is determined from previous experience, and by the general purchasing policy of the company. For instance, if it has been decided to purchase a six months' supply of any material, previous experience will show just how much constitutes a six months' supply.

3. *Procuring materials.*—The procuring of the material required usually involves the investigation of a number of sources of supply. Price, prompt delivery at a specified time, and the quality of service rendered, invariably are important considerations. Standard specification forms are used and orders are placed on numbered purchase-order forms of the company. Carbon copies are made for record and follow-up purposes.

If there is reason to believe that delivery may be delayed, the supplier should be reminded of his obligation several days before the promised delivery date. Many concerns use a carbon copy of the purchase order as a tickler copy.

4. *Storing and issuing materials.*—The storing of supplies involves providing a central storeroom

where the supplies may be kept in orderly arrangement until they are wanted. According to the extent of the demands of an organization, one or more supply clerks, or stock clerks, may be employed. The storeroom should be so laid out that the items most frequently called for are nearest the delivery window, and bulky items should be placed on lower shelves to avoid unnecessary lifting. Adjustable steel shelving is very satisfactory for stationery storage and generally is used for that purpose.

There is some question as to the necessity of keeping a stock record. The chief value of such a record is that it serves as a perpetual inventory, that it aids in checking up on receipts, and that it indicates the quantity of material on hand at any one time. However, the record of receipt is contained on the receiving ticket, and assurance that the supply will not run out unexpectedly may be obtained by setting aside a reserve supply sufficient to last from the time a purchase order is placed until the new order has been received. This supply may be labeled: "Reserve—not to be used until main supply is exhausted." As soon as the regular supply has run out and the reserve package is opened, the new purchase order is placed. When the new supply is received, another reserve material lot is set aside, as before.

Stationery and supplies usually should be issued only upon requisitions bearing the signature of some stated authority. The use of the requisition serves

to prevent the issuing of supplies to unauthorized individuals. The quantities called for on requisitions should not exceed a week's supply. This caution will discourage the waste of materials that occurs when they are issued in too large quantities. If a stock record is kept, it will be necessary to enter all disbursements on the stock record, and strike a balance each time material is withdrawn by requisition.

5. *The administrator's problem.*—The units of stationery and supplies usually are so very small (pencils, erasers, paper clips, rubber bands, pads of paper, and so on) that they seem insignificant in unit form, especially to the employee who uses them. But although the money value of each of these units obviously is small, their total cost over the period of a year amounts to a considerable sum.

Three rather important factors enter into the total cost. First, there is the actual amount paid for the material bought. Second, misuse of stationery (that is, for other than company purposes) is apt to represent a substantial loss. The central storage system, with disbursement by requisition, usually acts as an effective check on such misuses. There also is the factor that often is overlooked entirely—unnecessary waste. It occurs in two forms: (a) using more than is needed, and (b) using, or attempting to use, materials unsuited to a given purpose. By establishing standards and providing materials in accordance with these standards, the administration takes an important step toward eliminating unnecessary office waste.

REVIEW

List the five factors that must be taken into account in the handling of stationery and supplies in an office. Describe what each factor implies.

Explain the use of standards and "order quantities" in obtaining supplies.

Name the important elements involved in procuring materials for office use.

Outline the methods considered most effective for storing, issuing, and replenishing supplies.

List the three items of waste that run up the cost of office supplies.

Describe the methods used in your own office, or in some other with which you may be acquainted, for selecting, procuring, and storing office supplies, issuing them to the staff, and replenishing the stock.

CHAPTER XII

JOB ANALYSIS AND JOB SPECIFICATIONS

1. *The office worker.*—The individual worker is by far the most important factor in the office. Before discussing the methods followed in choosing office employees, it is necessary to consider the basic principles involved in the process of selection. The administrator is faced constantly with the problem of reducing labor turnover to a minimum. A careful analysis of both the job and the applicant who is chosen to fill it, before the applicant is placed, will reduce to a minimum the number of "misfits" who find their way into the organization. A thorough study of a given job should enable the investigator to know the time, the skill, the training, and the physical qualities required for the efficient performance of that piece of work. With this information before him, the manager is able to choose the best qualified applicant.

2. *The clerk.*—All office work is regarded as "clerical," and all office workers may be classified as "clerks." One clerk may be employed primarily for typing, another for bookkeeping, and still another for filing. The typist operates a machine, perhaps typing form letters during the morning and address-

ing envelopes in the afternoon. The work may be of practically the same kind all day long, or it may vary from hour to hour. The bookkeeper may use pen and ink, or a bookkeeping machine. He may specialize on a certain ledger, or work on all of the accounting books. The file clerk may work on letter files, card files, or other equipment, perhaps in a central filing department, as one of a force of file clerks, or in some one office department. A secretary may do typing, and a certain amount of bookkeeping, as well as handle a multitude of other tasks. All of these employees, however, come under the broad, general classification of "clerk," because they work in an office. Thus, the title of clerk, file clerk, bookkeeper, typist, machine operator, or secretary, does not, in itself, indicate precisely the kind of work that is involved.

3. *Specific definition of duties.*—Before attempting to fill a given position, it is essential, in an efficiently managed organization, carefully to analyze the position and collect specific information regarding every detail of the work involved. This is called "job analysis." Then a decision must be reached as to the type of person required to do that particular work. After that, it is a simple matter to compare the information obtained through job analysis with the information that is available concerning the applicant's capabilities and eliminate all applicants whose qualifications do not meet the requirements.

4. *Obtaining a clear conception of the job.*—When

a new employee is added to the staff, the manager has in mind certain work that this employee will be expected to do. The work may or may not be difficult to perform. It may have to do with only one, or it may cover more than one, of the office operations. The working conditions may be pleasant or they may be disagreeable.

Whatever the circumstances, the one who selects the new incumbent is quite likely to be guided by the success of the last holder of the job. If this person did his work excellently, probably a successor will be chosen who appears to have similar characteristics and qualifications. This is common practice, but it does not represent a thoroughly scientific method of procedure. The employer, under such circumstances, places more emphasis than is desirable upon personal characteristics, with the hope that the employee will be able to size up his job and make the most of it. A costly mistake is made in placing much of the burden of job study upon the new employee rather than in the hands of some thoroughly competent and experienced member of the office staff.

In talking with an applicant for a position, the employer should be able to give that applicant a clear and detailed word-picture of the exact work to be done. He should make sure that it is thoroughly understood. Then there is little likelihood that the necessity will arise for replacing that new employee within a short time "because the work wasn't what he thought it was." The fundamental point to keep

in mind is this—the company is not merely trying to "hire an employee." It is endeavoring to select, with care, a person who is expected to do well a specific piece of work: one who also has the basic qualifications expected of a permanent member of the organization.

5. *Collecting job specification data.*—In nearly all cases the most satisfactory source of information about a certain position is the person already engaged in doing that work. That person's aid should be enlisted in making the job analysis. There are several ways of compiling a record of the analysis, ranging from a simple narrative description to the report of a detailed job study as made by an experienced job analyst. Probably a combination of the simple description of the worker and the report of the experienced analyst will be most helpful to the administrator. Of course, for normal employment purposes, a simple analysis is much less expensive than a scientific job study.

6. *A successful method.*—One office manager uses the following procedure with excellent results. First, he talks with the department head about the work and personnel of his department. The organization of the department is charted roughly, to indicate the relative responsibility and authority of the department head, section heads, supervisors, and employees. Then the discussion is turned to the work of the department as a whole, and the work of individual sections. As far as possible, the manager

covers the work of each employee, or at least each type of employee, in detail. He also endeavors to obtain each department head's conception of the functions and duties of his department.

Following this conference, the manager talks with the section heads and supervisors separately and sesures their ideas about the work for which they are responsible, as well as the methods of doing such work. These conferences take place invariably in that part of the office where the work is being done so that the employee can illustrate his description with actual examples. Often the idea of the section head differs in some details from that of the department head concerning the work. However, as the object of the investigation is solely to get facts, not to straighten out misunderstandings or disagreements, nothing is said about such differences at the time of the conference. The supervisor is encouraged to say freely what he has on his mind about the problem being studied.

Then the manager gets the worker's own idea of what he is doing—and why. This investigation is supplemented by such observation of the work as may be necessary to find exactly how the work comes to the worker, what he does to it—and why—and where it goes from that point.

7. *The resulting job specification.*—When the office manager finally has determined the facts for himself, he draws up a description of the work done by each class of employee, from department head

to office boy. From this description he makes up the job specifications, indicating what the requirements are for each position. Each of the job specifications, as finally drawn up, includes these points:

(a) Name of position
(b) Description of the work
(c) Education necessary or desirable
(d) Training necessary, or desirable, if any
(e) Experience necessary, or desirable, if any
(f) Conditions under which the work is done
(g) Amount of supervision received or exercised
(h) Appliances or equipment used
(i) Contacts employee has with others
(j) Particular physical qualifications necessary, as to eyesight, hearing, strength, endurance
(k) Sex preferred, and why
(l) Age preferred, and why
(m) Line of advancement from this position
(n) Increases, their frequency, and the top figure for this position
(o) Starting salary

Although a job specification of this kind may take some time to prepare, it is well worth while, and it serves as a standard for all subsequent applicants. In Fig. 14 is shown the job specification sheet used by the Westinghouse Electric & Manufacturing Company for office positions.

8. *Reports of analyses.*—In addition to the job analyses which one may make in his own office, several analyses, or occupational descriptions as they often are called, have been prepared by various agencies. The classification of stenographers as made

JOB SPECIFICATION OFFICE EMPLOYES

Occupation..... No..... Class..... Job No.....

Dept..... Division..... Section.....

THE WORKER:—

Age Limits.....

☐Man	☐Grade	☐English	☐Accuracy	☐Memory
☐Woman	☐High School	☐Mathematics	☐Alertness	☐Tact
☐Tall	☐Commercial	☐Stenography	☐Analytical	☐Observation
☐Medium	☐Technical	☐Typing	☐Concentration	☐Speed
☐	☐	☐Writing	☐Executive	☐Systematic

Experience (Time) Previous..... To Learn..... How Taught.....

Remarks:

Front

THE WORK:—

Hours..... to..... Sat..... to..... Promote to.....

Approximate Number on This Work—Men..... Women.....

☐Adding Machine	☐Blue Prints	☐Sitting	☐Check
☐Comptometer	☐Routine	☐Standing	☐Hourly
☐Dictaphone	☐Supervised	☐Reaching	☐Salary
☐Slide Rule	☐Regular Overtime	☐Walking	☐

Description of work

Westinghouse Electric & Mfg. Co.

Reverse

FIGURE 14—JOB SPECIFICATION SHEET FOR OFFICE EMPLOYEES

by the Boston Chamber of Commerce already has been mentioned in Chapter VIII. The United States Department of Labor has prepared a pamphlet that describes seventy-two office positions commonly found in business organizations. Several large companies have prepared analyses for their own use. These companies include such prominent organizations as the Illinois Merchants Trust Company, Henry L. Doherty and Company, The Equitable Life Assurance Society, and the Federal Reserve Bank of New York.

Probably the most comprehensive group of job descriptions is contained in the report prepared by a Congressional Commission (Sixty-sixth Congress, Second Session, House of Representatives Document No. 686) which analyzed the work of about 100,000 civilian government employees, and divided the positions held into more than 1,700 classes. This report gives a job description for each class, including the duties, the qualifications, the principal lines of promotion to and from each position, and the compensation.

9. *Other considerations.*—In addition to the job specifications, there are other points to be considered in selecting office employees. It is desirable to keep the make-up of each group as homogeneous as possible. Better spirit, better teamwork, more congenial fellowship, and less antagonism and disruptions among employees are secured when the members of a group: (a) are of about the same age, (b) have

about the same likes and dislikes, and (c) are nearly on a par with one another in educational attainments. The introduction of a disagreeable personality into a congenial group results not only in slowing down the output perceptibly and decreasing the quality of work of that group, but also in making things unpleasant generally. Incidentally, it is just as important to remove disturbing elements from a group of employees as it is not to introduce any.

The questions of race and religion are delicate ones, and cannot be disposed of easily. Consideration must be given to the make-up of the present office force. Some concerns purposely refrain from hiring individuals of particular religious preferences or races, while other employers hire only those of religious faiths or races that they specially prefer. Still others endeavor to maintain a well-proportioned distribution of faiths and races, believing that with this arrangement there will be less friction than where certain groups predominate. Each administrator must settle this question for his own company, his decision being based on the fact that there is specific work to be done, that he wants to get that work done well and quickly, and that he requires competent, intelligent employees, properly supervised and fairly compensated—all enjoying congenial working conditions.

Frequently, it may be necessary to make additions to the office force that seem at the time to be temporary. However, if there is a possibility that the temporary position will work out into a permanent

one, the employer should bear this in mind. He should determine, as far as possible, whether or not the applicant is capable of growth and whether it will be profitable for the company to develop him. No harm can be done by choosing temporary employees with the same care that is exercised in choosing permanent workers.

The successful manager proceeds with care in all these matters, realizing that it is easier to tear down than to build up, and that he is essentially a builder.

10. *Securing stability.*—The effectiveness with which a business is conducted is dependent largely upon the ability of the individuals who handle the details. It is obvious that in transactions between two concerns, the firm with the more capable employees, other things being equal, is in a more advantageous position. One firm may look upon its office employees as an expense burden upon the sales department. Another may consider its office force as being a support to the sales department, actually aiding that department in getting more business. In the first instance, the office is merely a group of "clerks." In the second, the employees in the offices are coöperators, each specially selected and qualified for the work he is doing.

For this reason, job analyses and job specifications are important. They are invaluable tools of management. A job analysis shows just what is done by the worker on the job, and the conditions under which the work is done. The job specification gives the

same facts, together with information about the qualifications of the employee who should be able to perform that specific piece of work satisfactorily. The advantage of preparing job specifications is the same advantage that accrues to all standardized procedure —the matter is settled for all time, unless and until conditions change. The element of stability is important in scientific management. The more items that can be definitely fixed, the less variables there will be to demand the attention of the administrator.

REVIEW

Explain the importance of defining specifically the duties of each office job, and the use of these specifications in selecting employees.

Outline the manner in which job specification data may be collected.

List the points covered in a typical job specification.

State and explain the importance of certain other considerations, in addition to the requirements of the specific jobs, that must be taken into account in building up an office force.

Explain how the use of job specifications stabilize the office force.

Draw up a job specification for some office position—preferably one that you may now hold, or that you have held. Write this specification as it might appear in the office records.

CHAPTER XIII

SELECTION OF OFFICE EMPLOYEES

1. *Fundamental considerations.*—In the average office it will be found that the largest element of cost is that of personnel. Consequently, all factors relating to clerical workers must be subjected to thorough scrutiny. The administrator must make every effort to reduce labor turnover to a minimum. Turnover, undoubtedly, is one of the most insidious sources of waste.

Errors in selecting office employees probably never can be entirely avoided, but certain principles of procedure can be adopted that will tend to reduce the chances of error. The employment manager should be a man of more than ordinary ability, one of the most capable and trustworthy of the entire organization. Upon the soundness of his judgment depends, very largely, the soundness of the material with which the whole organization is built.

2. *Factors involved.*—The satisfactory selection of office employees involves:

(a) A knowledge of the requirements of the position to be filled
(b) Where to locate applicants
(c) How to interview applicants successfully

(d) How to make the selection of the applicant who is best qualified

3. *Sources of workers.*—The sources from which applicants can be secured, and the reliability of such sources, are subject to so much variation from place to place, that it is hardly feasible to speak about the problem with much definiteness in this volume. Usually, however, in any city, there are well-established sources from which employees can be obtained. The logical source of a bookkeeping-machine operator would be either a school where such operators are trained, or the local agency of the manufacturer of that type of machine. In seeking an employee for a minor position of this type, usually it is unnecessary to consider candidates from sources other than these two bureaus. If it should seem desirable to interview applicants from a wider field, the manager would notify all available agencies of good reputation, and perhaps he would advertise in the local newspapers. The following sources generally furnish suitable applicants:

(a) Schools and business colleges
(b) Equipment manufacturer's agencies
(c) Employment agencies
(d) Friends and acquaintances of present employees
(e) Applications on file
(f) Newspaper classified advertisements

4. *Schools and colleges.*—Schools and colleges, in most instances, are dependable as sources of supply. Most educational institutions that conduct employ-

ment bureaus are desirous of placing their graduates to advantage. As a rule, they are very coöperative. Usually it will be found that each institution trains its students along specific lines. An effort should be made to find the school with graduates of the type most suitable to meet the requirements of the position to be filled.

Recent graduates, as a rule, are desirable material to train. They have been drilled in regular habits of work and are experienced in observation and in absorbing knowledge. Their minds are in a formative state. It must be remembered, however, that most positions which are open to recent graduates are likely to call for a considerable amount of repetition of daily duties, while the school work of students, in most cases, has been varied and progressive. In school there has been a constant appeal to the student's interest, a never-ending attempt to stimulate mental activity. Consequently, the monotony of office routine work soon begins to wear upon the average young employee. Unless the employer sees to it that such a worker has "room to grow," and that work of a somewhat diversified character is given to him, the probability is that soon there will be another vacancy to fill.

5. *Office-appliance agencies and employment agencies.*—Manufacturers of office appliances often find it advantageous to establish and maintain employment bureaus for operators of their appliances. Some manufacturers offer training courses, particu-

larly in localities where their equipment is being purchased so rapidly that the training of new operators is almost a necessity. The ability of the manufacturer to convince the prospective purchaser that no trouble will be experienced in securing competent operators often aids in the sale of an office machine. To secure the services of a machine operator, in cities where such facilities are available, the local agency of the manufacturer of that machine should be consulted. In many localities, the commercial schools train such operators.

All things considered, the average commercial employment agency, if conscientiously administered, is probably one of the best sources from which to obtain office workers. Commercial agencies usually make a charge either to the applicant or the employer. Getting the right kind of service depends largely upon three things:

(a) Selecting the best agency
(b) Providing it with complete specifications
(c) Giving it enough time to meet the requirements

It is advisable for employers to invite the agency representative to visit the office and find out at first hand the type of employee needed for the position open.

6. *Friends of present employees.*—Friends and acquaintances of present workers may be desirable as employees. There is some advantage in seeking new members of the staff through this source, though the

experience of some employers has led them to avoid hiring near-relatives or close friends of those already employed. When talking with employees about friends who might like to work for the company, it is most important to emphasize that it is a demonstrated ability to do the work, rather than mere friendship, that is to be considered. Diplomacy will be needed, for ill feeling is easily aroused when friends of employees are rejected.

7. *The application file.*—Every business receives unsolicited applications for employment. Too much reliance should not be placed upon such applications. It is seldom that such an applicant can be placed immediately, even if well qualified. By the time a position is open, the applicant frequently has lost interest or has obtained another position. Naturally, if he appears to be an exceptional candidate, the application should be retained for future reference.

8. *Newspaper classified advertising.*—The classified-advertising columns of newspapers are unusually effective in securing the services of the higher-grade employee, particularly in cities. The so-called "blind advertisement" has proved to be most advantageous when a company advertises in the "Help Wanted" column. Careful wording, giving a definite outline of the duties of the position, and the qualifications demanded, will help to secure the best type of reply. A clear description of the position will attract more desirable applicants—those, at least, who consider themselves capable of doing the work specified—than

will a mere statement of the fact that such and such a position is open. Inasmuch as the advertisement does not contain the name of the company, the employment interviewer is not troubled with large numbers of uninvited applicants. The company is enabled to summon for conference only those people whose written applications seem to offer the most promise. The effectiveness of these advertisements depends upon:

(a) The newspapers selected
(b) The day of publication
(c) The wording of the advertisement

Because different newspapers appeal to different groups, it is necessary to ascertain, by inquiry or trial, which ones are best as advertising mediums for the business concerned. Advertising on some days of the week proves more effective than on others. Sunday, for instance, is usually an excellent day, since persons looking for work have plenty of time to look over the advertisements on that day.

The use of only a "box address" in help-wanted advertisements is an advantage because it conceals the identity of the employer. The disadvantage is that many desirable applicants will not answer "blind ads" for the reason that they do not know who is doing the advertising. Perhaps it is the present employer. The use of the company's name in the advertisement will remove this objection, and the request that applications be made *by letter only* will

serve to discourage personal calls. Decidedly few employers will hire an individual without at least one interview. All that a letter can do is to indicate to the employer whether or not the applicant who writes the letter seems to have the necessary qualifications.

Some employers feel that applicants who have enough acumen to advertise for a position in the "Situations Wanted" column must have ability. This assumption, however, is not always well founded.

9. *First contact with applicants.*—The task of interviewing applicants is one of major importance. Some concerns require every applicant to fill out an application blank. Other employment managers talk briefly with each applicant before determining whether or not it is worth while to ask him to make formal application. An applicant who really cannot be considered seriously should not be asked to take time to fill out a lengthy application blank. In fact, it is a waste of the interviewer's time if he fills out even his own information blank for each interview. Nevertheless, many interviewers feel that they gain a better knowledge of the applicant in the process of recording the facts. The practice to be followed properly depends upon the interviewer's "technique."

The interview itself can be made a pleasant conference, or it may degenerate into an obnoxious inquisition. The administrator should be certain that his interviewer is properly fitted to perform his duties

and that he appreciates the importance of a courteous approach to the applicant. It is through him that the applicant receives his first impression of the company. Except in cases of dire need, no one wishes to work in an office in which he is not going to be happy. If the first contact is unpleasant, the applicant naturally believes that the subsequent ones are likely to be unpleasant also.

As a rule, applicants for employment are inclined to be somewhat nervous at the time of interview. This is to be expected, since the applicant is undergoing an unusual experience, often an unwelcome task made necessary by circumstances over which he has no control.

10. *Information needed.*—The competent interviewer will endeavor, first of all, to put the applicant at ease. All signs of impatience or haste should be banished. Every effort should be made to penetrate any barriers of reserve. In securing the necessary information, the interviewer should have the following questions in mind:

(a) Can this applicant do the work which must be done?
(b) Has he the necessary training and experience?
(c) Where did he get it?
(d) Is he the type of employee we want?
(e) Will he be likely to get along well with the others?
(f) If he has not the experience, can he be trained easily?
(g) Will he be satisfied in our organization?

The matter of salary should be the last thing to

be taken up. The first point to be settled is whether or not the applicant is qualified to do the work and whether he is the type of man who is wanted in the organization. Only after this decision is reached should salary be mentioned.

The application blank should bear all of the inquiries that are likely to be made, at any time, pertaining to the history of the applicant. A typical application blank is shown in Figs. 15a and 15b.

11. *Mentioning office requirements.*—The success of a new employee, in many cases, is determined by the carefulness and thoroughness with which the interview has been conducted. The moment of employment is the most impressionable one, as far as the applicant is concerned. He will remember nearly all that is said at that important interview. If the matter has been handled properly, he will realize that his acceptability as a member of the organization depends upon how closely he conforms to the fixed requirements.

12. *Testing the applicant's ability.*—In some cases it is desirable to test the applicant's ability before making a definite decision—especially his ability to do the actual work to which he will be assigned. The value of these tests will depend upon the care with which, and the circumstances under which, they are taken. Such tests usually include: (a) a list of questions designed to measure the applicant's knowledge, and (b) a practical test of his ability to do the specific work.

CONFIDENTIAL APPLICATION FOR EMPLOYMENT

This application is not only a factor in considering you for employment, but is also kept as a permanent record of you if employed. Please fill it out with this point in mind.

Date.....19....

Name (in full)..... Phone.....

Address (in full).....

Street and No. City State

Position applied for?.....Salary expected?.....

Where born?..... Date?..... Living with parents?.....

If not, why not?.....With whom?.....

Married?..... How long?..... Number of children?.....

What is your father's name?.....Occupation?....Nationality?....

What is your mother's name?.....Occupation?....Nationality?....

Are you employed at present?.....

How soon could you take a position with us?.....

Please record your education below.

	Name of School	Length of time attended	Graduated
Primary			
High School			
College			
Bus. School			
Trade School			
Night School			

In school, what studies did you like best?.....

What least? .....

Can you speak any foreign languages?.....What are they?.....

FIGURE 15A. APPLICATION FOR EMPLOYMENT

PREVIOUS EMPLOYMENT AND REFERENCES

(Give in chronological order beginning with most recent position)

	Present or last employed by	Previously employed by	Previously employed by
Name of firm			
Name of Employer			
Address, Street,			
City and State			
Nature of Business			
Length of Service			
Position held			
Salary			
Reason for leaving			

Personal References—Please give the names and addresses of at least two persons of good standing, to whom you are not related and by whom you have not been employed.

Name.....

Address.....

Street and No. City State

Name.....

Address.....

Street and No. City State

Name.....

Address.....

Street and No. City State

GENERAL

Have you any friends or relatives in this office?.....Who?.....

Who recommended you to us?.....

Are you qualified to do any other work than that for which you are applying? ..... What?.....

If you could have any position you wished for, what would it be?...

What is your religion?.....

Are you a member of any athletic, social or church organizations?...

What are they?..... How often do you attend?.....

Do you engage regularly in any athletic sports?.....

What are they?.....

Have you any hobbies such as music, dancing, painting, drawing, etc? .....

What are they?.....

Is there anyone dependent on you for support?.....Who?.....

Have you a savings account?..... What bank?.....

Remarks: .....

.....

FIGURE 15B. REVERSE SIDE OF APPLICATION BLANK

As an example, in the case of a stenographer the following points should be brought out:

(a) Can ordinary dictation be taken at a reasonable speed?
(b) Can notes be read accurately?
(c) Can the typewriter be used satisfactorily?

Some office managers, instead of testing the stenographer's competence in the order here given, start with typewriting proficiency. The applicant is given a carefully prepared article to copy on the typewriter —an article containing numerous mistakes in spelling, punctuation, and capitalization. A good typewriter is supplied and the applicant is told to copy the article and to make such corrections as appear to be necessary. A test of this kind will indicate the degree of stenographic proficiency possessed by the applicant. It will show whether or not the subject matter is placed on the page to advantage, whether or not there are any "strike-overs" or careless erasures, and whether the candidate's touch is sufficiently even to meet the requirements of the office. Usually the typist's test is given to all stenographic applicants because it measures their typing ability. It prepares the way for the regular stenographic test by permitting the applicants to gain at least a degree of familiarity with the machines which they must use.

13. *Stenographic test.*—If a given candidate passes the typist's test satisfactorily, the examiner then dictates a letter and gives instructions regarding its set-up. This letter tests the applicant's ability to

take notes and transcribe them, as well as to receive instructions and carry them out correctly. The way in which the candidate meets these test requirements is a fairly reliable index of competency.

14. *Tests for other positions.*—To obtain reliable results, all tests that are prepared for the different office positions should be made up with much care. The best tests are those prepared by examiners of long experience, who know how to evaluate properly any test of proficiency. Copies of scientifically prepared tests of this kind may be purchased. Their use is advisable unless the examiner is skilled in preparing employment tests.

The examiner should experiment with the test to be used before he concludes that positive results are certain of attainment. This is particularly advisable in the case of so-called "psychological tests," designed to measure mental qualities.

15. *Checking the applicant's references.*—The checking of an applicant's references is not a perfunctory task. There are two important points to be considered: (a) the record which includes the references, and (b) the truthfulness and completeness of that record. Any omissions should be given close attention. If one part of the record is found to be untrue, the whole should be disregarded. Dishonesty and untruthfulness are unforgivable in business.

If the record shows any periods of unemployment since the applicant left school, the interviewer should check up carefully the reasons for such unemploy-

ment. Ordinarily the reasons are brought out in the course of the interview. The accuracy can be checked only by getting in touch with former employers and investigating all references. The most effective way to secure this information from former employers and from those whose names are used as references is by means of a simple, but thoughtfully prepared, check list. In these days of fast-working business, a long list will defeat its own purpose. The information wanted from an employer is:

(a) Length of service (approximate dates)
(b) Position held
(c) Proficiency and health
(d) Reason for leaving
(e) Ability to get along with fellow-workers

The information desired from other references includes:

(a) How long have you known the applicant?
(b) In what capacity?
(c) Are you related?
(d) From your knowledge of the applicant, what is your opinion of his character?
(e) General remarks which you may consider helpful?
(f) Any other information that may be necessary

Because of the requirements of certain positions, additional questions, designed to bring out the desired points, may be included. Bonding companies usually go into an individual's record with meticulous care. The securing of detailed information may well

To..... Date.....19.....

HELP REQUISITION

Please secure for me a (temporary / permanent) employee

in accordance with the following instructions:

Position .....
Department .....
If temporary—How long?.....
Approximate salary .....
Date wanted .....

Signed.....

Hired on .....
Salary ..... By.....

When the department head has approved the hiring of the applicant, fill in the attached stub and send it to the Accounting Department. Please return this form to the Office Manager together with the Employee's Application Blank to be filed in the Employee's Record Envelope.

To Accounting Dept. Date.....19...

Mr.—Miss ..... has

been hired to begin work in the.....dept.

on..... at.....per week.

Signed.....

FIGURE 16. EMPLOYMENT REQUISITION

be left to those companies, for they are in a better position than the employer to obtain it.

Physical examinations, psychological tests, character-analysis tests, and so forth, are valuable aids. Information about them is supplied in texts relating to personnel administration.

A personal conference with former employers, even if only a telephone talk, is extremely valuable. Questions may be asked freely under such circumstances, and they are likely to be answered more fully than when the whole story is told in written form. People often will *say* what they will not *write*. By a personal call, the inquirer can judge for himself as to the existence of any prejudice, and as to the weight which should be given to it.

16. *Employment requisition.*—In passing, it may be of interest to refer to the method of informing the employment manager of an actual or impending vacancy. It is customary for offices to use formal requisition blanks for this purpose. These blanks range from simple memoranda to elaborate forms, but in general they are relatively simple, like the specimen copy shown in Fig. 16.

17. *The administrator's problem.*—The building of a working organization in a scientific way is the aim of the administrator. It should not be forgotten that until scientifically prepared tests are developed and administered by skilled examiners and under standardized conditions, the results of the employment-bureau activities cannot be ideal.

REVIEW

List the factors involved in the selection of office employees.

Name the sources from which office workers usually are obtained.

State the advantages of obtaining employees from schools and colleges.

Comment on the relative importance of office-appliance agencies and employment agencies as sources of office workers.

Explain the advantages and disadvantages of obtaining employees through newspaper classified advertising.

Outline the correct method of interviewing an applicant.

List the items on which information is needed regarding an applicant for an office position.

Describe the value of tests in selecting applicants. What items should be covered in the case of a stenographer?

Of what use are references? Outline the data that may be desired from a former employer and from a "character" reference.

Describe the methods by which applicants are selected in your own or some other office.

CHAPTER XIV

EMPLOYEES' TRAINING AND SUPERVISION

1. *Value of special training.*—The specific training of the new office employee may have one or both of the following objectives:

(a) Instruction in the company's ways of doing certain work in which he has had experience
(b) Instruction in the company's ways of doing certain work in which he has not had experience

In addition, he must be made familiar with the company's general requirements. He must be introduced personally at least to those with whom he will come in daily contact.

Although the new employee may have had wide training and experience, when he comes to a new position he will find that there are differences, perhaps slight, between the work he has been doing and the work he is to do. Even in the same kind of work there are bound to be differences, not so much in the underlying principles as in the application of those principles. In the normal growth of an office, with the inevitable changes of personnel, procedures are developed that show the impress of the various individuals who have handled the work, or who have

been responsible for it, over the period during which the business has been operating. The office procedure in one business may vary considerably from that in another concern in the same line of business, even though the underlying principles and objectives are the same.

Specific instruction is given for the purpose of showing the new employee, already experienced in similar work, precisely how the company with which he has just become connected desires his experience, knowledge, and ability applied to its work. The greater the readiness with which he can adapt himself to the requirements of the new position, the less the amount and intensiveness of training he will need. This factor probably explains why older applicants for certain positions are not looked upon with much favor. These applicants may have been doing their work in a definite way for so long a time that they would find it difficult, if not impossible, to change their ingrained habits. On the other hand, some employees, who have had a rich and varied experience with several concerns, are more readily adaptable, because of their wider vision and their knowledge of methods which save labor in the routine operations common to all offices.

Giving a new employee specific instructions in the company's ways of doing work in which he is not experienced may require him to develop an entirely new technique. Much depends upon the complexity of the work to be performed. The simpler the work,

the less the background necessary, and the more quickly the new employee can be brought up to the desired standard of operating efficiency. Of course, the real objective in giving any kind of instruction to employees is to improve their ability to turn out a standard volume and quality of work in a standard time.

2. *Training plans in common use.*—Two facts must be recognized: (a) Some employees learn much more quickly than others, and (b) some kinds of work are more easily mastered than other kinds. It is obvious, therefore, that the method of instruction to be used will depend upon the immediate requirements of the specific job.

The methods most frequently employed are:

(a) Training by an older employee
(b) Training by the supervisor
(c) Training by an instructor
(d) The vestibule school
(e) The part-time school

If a department head or supervisor handles the training of the new employee, and has enough time at his disposal, the results probably will be quite satisfactory. If the instruction is hurried, however, then the accomplishment will be satisfactory only to the degree that the training is thorough. Hence, many concerns turn over the instruction of a new employee to some older worker who is in the same department and doing the same, or similar, work. Sometimes the new man is assigned to one who has had experience

in that work and knows how it should be done, although he is not actually engaged in it. Here, again, the thoroughness of the instruction will depend upon the time at the disposal of the one selected to do the instructing, and upon the interest which that individual takes in his teaching task. Some employees are unusually conscientious in connection with such duties, and do not hesitate to assume the responsibility for the careful training of the new employee. Others feel that any time which they may take from their own work is merely time lost for which they receive no benefit—lost time that goes on the record as representing lower production on their own part. Obviously, if such a worker is held responsible for delivering a certain amount of work within a certain period, some allowance must be made for time that he is asked to devote to instructing others.

Where an older employee takes care of the training of a new worker, the department head or supervisor should still have contact with the new man's work during the first few days. This is necessary not only to make sure that the work is being handled properly, but also to give the new worker encouragement. The fact that the department head is sufficiently interested to evidence a sympathetic attitude is stimulating to the morale of a new employee.

3. *Training by regular instructors.*—Training by an instructor may be what is known as "training on the job," like the two methods discussed above, or it may be instruction given prior to the time when the

new employee actually is placed regularly on his new work. The latter method is referred to as the "vestibule-school method." It should include complete preliminary training in the specific performance of the work, whether that training takes an hour, or several days. Frequently, vestibule-school training is not particularly well rounded or comprehensive. In most cases, in fact, it is not necessary that it should be. The object is to transfer to the employee just enough skill in performing certain work to enable him to perform that work reasonably well. No attempt is made, in most cases, in vestibule-school training, to give the employee any more background than actually is necessary. Generally speaking, vestibule-school training does not require a schoolroom or school equipment. It is not the facilities that are important, but the method. If large groups are to receive the same instruction at the same time, however, facilities must be provided accordingly.

The "part-time school" is intended to supplement the training possessed by the employee who already is working at his job. It is designed to make him either more efficient in his present work, or better qualified for the next higher position. Class instruction usually is provided, classes sometimes being held during the day, and sometimes in the evening. The requirements of each organization will determine the extent to which the company is justified in carrying its educational activities in this direction. Above all things, the administrator should not endeavor merely

to duplicate the training methods of others. He should aim to provide the type best adapted to his own company's needs.

4. *Centralization of responsibility for training.*— Whatever the methods used in training office employees, the best results cannot be obtained by haphazard procedure. The responsibility should be centered in one individual, either the office manager or the personnel director. No one is, or should be, more concerned than the office manager about having his workers well trained. He is responsible for the results secured by the office departments. Unless he is tied down by arduous routine duties that demand nearly all of his time and attention, he is bound to be actively interested in any program of office training. He often may help materially in determining what methods are best adapted to the needs of the company.

In a well-managed office, the training program will be thought out carefully. All employees, new and old, will be given proper instruction. Some employees may need training in fundamentals. Others may need training for specific jobs. Still others may need training for a broadening of their grasp of the business operations. In fact, the same employee may require all three types of training.

5. *Fundamentals of the training program.*— Every employee should know something about the concern of which he is a part—its history, development, organization, policies, procedures, and objec-

tives. This information, or part of it, may be given:

(a) Through the use of manuals as described in Chapter V
(b) Through talks with, or by, various executives and department heads
(c) Through the company house organ

A trip through the offices and the plant often will stimulate interest in the company's activities.

The manner of introducing a new employee to his fellow workers depends upon the scope of his work. If he is to come in contact with a large number of people, then his introduction should be more extended than if his contact were limited to a few employees. In any case, he should be introduced in a way to make him immediately "one of the group."

6. *Training for specific jobs.*—Each employee should receive specific training for the position he is expected to fill. This training is of immediate importance. Three factors enter into the satisfactory accomplishment of work by an office employee:

(a) An understanding of what is wanted
(b) A knowledge of how to do the work
(c) An ability to do that work successfully

The first element is supplied by careful explanation and illustration, the second by thorough instruction and demonstration, and the third by proper and effective supervision.

Unless an employee has a clear conception of what is expected of him, the only way that he possibly can do the work is through blundering into the correct

method, or through trying different methods until the right one is discovered. No valid excuse can be offered for not giving clear explanations to new workers. Even if the office work is rushed, ample time should be taken to plan and prepare thoroughly for its execution. Valuable time actually will be saved that otherwise would be wasted because of misunderstanding. Mistakes will be avoided that often are attributed to ignorance, but which more likely are due to a lack of understanding. The facility with which the new employee grasps the details of his work, and carries them out satisfactorily, will depend upon the thoroughness with which he is trained.

7. *Developing versatility.*—It is not a wise policy to arouse ambitions in certain types of office workers. Nothing is so obstructive to progress as ambition without ability. Therefore, when it is desired to develop versatility, it is well to choose carefully those whose present excellent service will not be impaired through the arousing of hopeless ambitions. There always must be "hewers of wood" and "drawers of water." Some people are happiest when permitted to go about their routine operations undisturbed.

A group of individuals selected for the training that will lead to higher positions can be prepared by methods similar to those already described. The instruction should be thorough. If the company does not wish to undertake such work itself, arrangements usually can be made with near-by educational insti-

tutions to give the instruction. It may prove feasible for the workers to attend classes at these institutions during the day or in the evening. Perhaps it will be well for them to become members of classes organized especially for the company. The company itself may form classes which will be conducted in the office by instructors from neighboring institutions.

The expense of study courses of this kind sometimes is divided between the company and the participating employee, while in other cases the company pays the entire tuition cost. Some concerns pay a part of the tuition cost at the start and require the employee to pay the balance. Then, upon the successful completion of the program of study, the company reimburses the employee for the amount that he has paid.

8. *Subjects covered in the training program.*—The subjects covered will vary with the nature of the business, the type of office work done, the ability and educational background of the employees, and the benefits that can be derived from the program. For stenographers, typists, file clerks, and general clerks who keep records and prepare reports, courses in the following subjects might be desirable: Business letter-writing, a review of spelling and punctuation, a study of office forms and their use, filing methods, the use and care of office machines, and special information about the operation of an office in the particular field of business concerned. For the accounting and cost departments, instruction might be provided

in accounting principles and practices, cost accounting, cost finding, handling of the payroll, preparation of financial records, use and care of accounting machines, and similar subjects. If the company has important purchasing, traffic, personnel, or legal departments, special courses in these fields may prove worth while. Members of one division might wish to take courses pertaining to other divisions, in order to gain a broad point of view of the business as a whole.

Insurance offices might have courses in actuarial science, risk bearing, finance, investment, real estate, and special legal phases of policy contracts. Other establishments might provide courses in buying, stock keeping, merchandising, salesmanship, store management, and related topics. Banks might conduct many special courses of a financial and investment nature. Industrial plants probably would wish to furnish instruction in general office procedure, in special subjects concerning the various office departments, and in such general fields as factory management and production control.

9. *How to make instructions clear and complete.*— Standard-practice instruction sheets, described in Chapter XII, have been found to be of great benefit in the training program. They describe the job requirements and the methods of meeting such requirements. The preparation of standard-practice instructions is rather a difficult matter. It requires a thorough grasp of the methods involved and an

ability to teach these methods. It necessitates the ability to record, in clear wording, the step-by-step instructions for performing specific work. Standard-practice instructions should be so clear that a person entirely unfamiliar with the work could handle it acceptably in a short time, after studying the instructions. Every step, and, in many cases, every motion, should be included. There should be no question whatever as to exactly what is to be done.

Some office managers maintain that the first day or two a new employee is on the job represents a period of such vital importance that he should not be assigned a full day's work, or even a partial day's work, at the start. First of all, he should be given the standard-practice instructions and asked to try his hand at the work on a practice basis. If his practice is performed in connection with actual office work, it is well to maintain regular contact with him and to inspect the finished product with strict regularity.

10. *Inspection of office work.*—The need for inspecting office work does not cease when the employee has learned to perform his duties. Every individual has his "good days." The quality of his work varies accordingly. Everybody makes mistakes sometimes. Consequently, a continual checking up is necessary.

Inspection not only provides the means of checking up on the quality of work done but also involves the setting of standards of quality. Neatness of finished work is a universal requisite. Accuracy is

necessary in many kinds of office work, particularly work involving calculations and computations. Adequacy and completeness are important factors, especially in work requiring reference to, and analysis of, statistical data. This also holds true in the preparation of reports and other documents.

A letter written in the office, on the company's letterhead, has been prepared by two people—the dictator and the transcriber. The inspection of such a letter, as far as the transcriber is concerned, should include these points:

(a) Is the letterhead the correct one to use?
(b) Is the sheet clean and free from smudges?
(c) Is the matter properly placed on the sheet?
(d) Is the typing carefully done, and free from erasures and strike-overs?

As far as the dictator is concerned, the following main points might be inspected:

(a) Does the letter give an adequate presentation of the subject under discussion?
(b) Is the message well and clearly expressed?

Of course, many other points might be checked, such as grammatical correctness, punctuation, correct use of words, and so forth.

Standards are desirable for each type of work done. With such standards to follow, the finished work is readily checked. As a result, the inspector can discover at once items that are not up to the accepted standard. Inspection may range from continuous examination of the work, and constant comparison

with the standard, to intermittent "check-ups" made for the purpose of seeing that there are no lapses.

Where continuous inspection is necessary, the inspectors should be subjected to thoroughgoing training. Some offices pay their inspectors a bonus for errors discovered. This provides an incentive for thoroughness.

Sometimes the supervisor can make an adequate inspection of the work as it passes through his group. In other cases, one worker checks a colleague's work. It should be said, however, that the latter plan is not always effective.

In the last analysis, the office manager is responsible for the quality of the work, regardless of the fact that he may have assigned inspection duties to others. The administrator should not fail to make this fact clear to his manager.

11. *The meaning and importance of supervision.*— The manager should have his organization running so smoothly that the work comes through on time, in the quantity planned and scheduled, with a minimum of friction, and with every employee taking a wholehearted interest in his work. Such an ideal is not at all impossible of accomplishment. Adequate supervision is of vital importance. Many troubles can be traced directly to inefficient supervisors. The supervisor has it within his power to make the work both interesting and enjoyable for his associates, or almost intolerable. Everything depends upon the manner in which he proceeds.

12. *Requirements of a successful supervisor.*—The duties of the average supervisor might be outlined as follows:

(a) Keeping the members of the group supplied with work
(b) Seeing that the work is turned out according to schedule
(c) Giving help and encouragement to any worker who may need it

In other words, the supervisor is directly responsible for the work turned out by his unit and for the effectiveness of the work done by each of the members of that unit. When the members of any unit feel that their supervisor deals fairly with his workers and that he can be relied upon invariably, they will exert themselves to the utmost to show that they are worthy of such leadership. An efficient supervisor knows when to rush his workers and when not to rush them; when to speak and when to keep quiet; when to commend and when to withhold commendation; when to criticize, and, above all, *how to criticize.*

The amount of what might be called "disciplinary supervision" will be reduced to a minimum:

(a) If the personnel of the unit has been selected with care and with due regard to the ability and desire of each member to coöperate with the others for the benefit of the firm
(b) If the workers have been carefully trained
(c) If the supervisor is of the right type
(d) If the working conditions are good

Under such circumstances, the position of the super-

visor will not be that of a "policeman," but that of a guide; not that of a "watchdog," but that of an esteemed leader.

13. *Handling disturbing elements.*—There are two actions of a disturbing character that should not be tolerated. One is interference of one worker with the work of another, in the form of teasing, "horseplay," or hampering of duties. The other is deliberate "laying down on the job." In the first case, the offender should be warned, and then discharged if he continues to repeat the offense. In the second case, the actual output of the individual who neglects his work can be compared with the normal output of good workers, and the difference pointed out to him. If two or three admonishings produce no improvement, dismissal is the only remedy.

Interruption of work may be caused by visitors coming from other departments, by members of one section visiting another, by visiting between individuals in the same group or, occasionally, by telephone calls. The supervisor should take appropriate steps to eliminate any difficulties of this nature.

14. *Attendance and tardiness.*—In most offices there are at least a few workers who disregard the regulations concerning attendance and prompt arrival at work. Complete coöperation on the part of everyone, from the highest to the lowest ranking employee, is essential to any plan of controlling attendance and tardiness.

The chief objection to absence is the consequent

interruption to the work concerned. If the work is planned carefully and adapted to the forces available to handle it, when one of the workers is absent from the office, his part of the operation suffers. Either somebody has to take over the absent member's duties, in addition to his own, or a substitute has to be given the work.

The chief objection to tardiness is the consequent delay to the work of others who are depending upon the performance of the tardy person's duties. In addition, there is the undesirable influence of a bad example.

The best opportunity for taking precautions to reduce unnecessary absence and tardiness is the time when the employee is hired. It should be made perfectly clear to the new employee that regular and prompt attendance is expected of him as a member of the organization. The requirements of the company should be explained to him, and his willingness to comply with those requirements should be made a condition of his employment.

If it appears necessary to permit any clerk to work according to task, rather than according to definite hours, this condition should be explained. Employees who are obliged to observe regular hours should have no opportunity to complain that favoritism is being shown.

REVIEW

Outline the value of special training for office employees.
List the methods of training that are in general use.

State the advantages of centralizing the responsibility for training office employees.

List the subjects that might be included in a training program for groups of workers in your own or some other office.

Comment on the importance of standard-practice instruction sheets in the training program.

Select some office job with which you are familiar and prepare a check list of points covering inspection of this type of work.

Explain the functions of the supervisor of office work.

List the important factors in office discipline and state how they may be handled.

CHAPTER XV

EMPLOYEES' COMPENSATION

1. *Forms of compensation.*—In addition to the financial compensation which the office employee receives for his services, there are other considerations that he may regard somewhat in the light of compensation. Among these are the various advantages that the company provides for the members of its organization—advantages that will be outlined later in connection with the discussion of employees' welfare.

Financial compensation of office employees usually is arranged on a time basis, by the hour, day, week, month, or year, or on a production basis, by the piece or unit of output. Sometimes a combination of these methods is found practicable. The time basis, where compensation is paid by salary, is the plan most commonly used, and is, in fact, almost universal. However, office managers who have given serious attention to the matter have found that there are distinct advantages in paying office employees on the basis of output, if the work lends itself to the establishment of standard tasks.

If job analyses are made, as outlined in Chapter XII, and the standard output is determined in con-

nection with given jobs, the company is justified, of course, in making increased financial payment whenever any employee's output exceeds the standard. In other words, the compensation of employees of equal rank should vary in accordance with their output. Otherwise, differences in pay to workers performing identical operations are almost certain to lead to unfairness and consequent dissatisfaction.

2. *The salary plan.*—In the absence of any other acceptable basis of compensation, the ordinary salary plan is followed. Salaries are paid, theoretically, according to the value to the company of the particular work done by the employee. Unfortunately, however, the theory usually is not carried systematically into practice. Frequently, the salaries of workers doing identical work will be found to vary as much as 50 to 100 per cent, even in the same organization. This statement can be verified easily in almost any office, or by reference to the various analyses of clerical salaries which have been made either by the National Office Management Association, the National Industrial Conference Board, or the American Management Association. Two reasons may be given for this condition:

(a) The custom of paying an initial salary representing the lowest amount that a given employee will accept
(b) The handling of increases in salary in an unscientific way

The usual procedure in establishing office salaries

is to ascertain how much some other company is paying for the particular work and then adopt that figure. To pay less than the market rate limits choice of applicants, except in times when there is a surplus of clerical labor. Salaries for the same kind of work differ greatly in different parts of the country. Consequently, there is no "average salary" for any stated position. There are minima and maxima, but no real "averages." It is not wholly satisfactory to use as a basis the salary rate that occurs most frequently, but it may serve the purposes of the company until some better method can be adopted.

3. *Suggested procedure.*—The employer always wants a full day's work, and the employee wants a full day's pay. If the two can agree upon the quantitative content of these terms, important ground will have been covered; but, until such an agreement is reached, a compromise usually is necessary. Standardization of salaries is of utmost importance. The employer should determine the maximum salary that he is willing to pay for a first-class incumbent in each position, and let that figure be the maximum salary to be paid to those in that position, regardless of the length of service. He should then determine how long it will take the "average employee" to reach the highest degree of proficiency that he can be expected to attain on the job. Finally, he should determine the initial salary to be paid an employee starting in on that specific work. That should be regarded as

the standard minimum salary. The spread between the minimum and maximum salary should be divided by the number of "periods" (times of making increases) that are involved in going from minimum to maximum.

This plan will provide a basis for the establishment of predetermined increases at stated intervals. The chief objection to this simple arrangement for salary standardization is that it is automatic and operates without regard to actual increases in efficiency. On the other hand, an employee who knows, when he takes up his new work, that he is getting the standard starting salary for that position, and that he will receive regular increases up to a stated maximum, provided his proficiency increases at the expected rate, will be much more contented than an employee who has to bargain for the initial salary and who always is uncertain as to whether or not he will ever get an increase.

Those organizations that have adopted plans of salary standardization have found them decidedly advantageous, as a rule. They provide a definite objective for the employee to work toward, remove elements of favoritism, and tend to eliminate unwarranted aggressiveness on the part of individual employees who otherwise would press for increases. The plan does not in any way interfere with the award of special bonuses for exceptional and worthy service and proficiency.

An employee who understands that when he

reaches the maximum in his present position he will receive no more for doing that particular work, but that he may be transferred to a higher-salaried position for which he is prepared, will be likely to exert every endeavor to prepare himself for promotion as quickly as possible.

Of course, the only economic justification for payment of a salary is the delivery of services commensurate with the salary paid. Length of service should be a factor only to the extent that additional experience actually increases the value of the services rendered. However, if office salaries do not represent fair compensation, it is logical that length of service will be put forth as a justifiable plea for additional compensation. The payment of fair salaries, on the basis that we have just described, will go a long way toward solving the problem of "superannuated employees."

4. *Compensation on the basis of output.*—Compensation on the basis of output is decidedly effective and eminently fair, if output is subject to correct measurement. One danger in establishing a plan of compensation on the basis of output is that the rates may be set too high, or the standard of output too low. This difficulty has developed in connection with nearly all straight piecework plans, wherever used. Employers did not hesitate to cut the straight piece rates when they felt that employees were making more money than they should. The result was general dissatisfaction.

It is not possible to measure all kinds of office work with the same degree of precision. In fact, the work does not always come through in quantities sufficient to provide a production basis for compensation. For illustration, let us take an operation that requires one minute to perform. Let us assume that the compensation for that operation is one cent per unit. In a seven-hour day, 420 units will be produced, with earnings of $4.20. In a typical five-and-one-half-day week of 38 hours, the weekly compensation will be $22.80 for an output of 2,280 units. If the standard has been set fairly, there is an incentive for the operator to increase his output by putting forth the necessary effort. The production of only one additional unit for each five minutes would increase the weekly output from 2,280 to 2,736. This would represent wages to the employee of $27.36, or an increase of $4.56. The important thing to the employee is the additional $4.56. The important thing to the employer is the additional 456 units. Obviously, the additional compensation is a direct result of additional output. It furnishes an important stimulus to greater effort.

The plan accepts the standard output as 420 units a day. If the work comes through at the rate of 420 units or less a day, of course there is no opportunity for the operator to increase his compensation. Consequently, the production basis is not feasible in offices where the volume of work fluctuates greatly. In such offices a plan might be adopted that would

use the production basis in combination with a regular salary. Such a plan is not so complicated as it sounds, and it works satisfactorily if properly administered. It must be based, of course, upon a careful analysis of operations and provide an equitable rate of pay for each type of work.

5. *Wage incentives.*—The fundamental theory of any plan of remuneration is a fair day's work for a fair day's pay. Such incentives should be used as will stimulate the employee to attain a larger output without overburdening himself. Incentive plans involve the making of careful studies of the operations and the determining of a fair rate of production. When that rate of production has been tested by actual use, and found to be neither too high nor too low, then it is made the standard. Compensation is determined accordingly.

There are a number of wage-incentive plans, but they all have the same objective. One plan guarantees a day's pay regardless of output. If the output is over the standard, a bonus is paid. Another plan, known as the Emerson Efficiency Plan, provides for payment on an hourly basis, regardless of how long the worker takes to perform his duties. If he finishes a standard task in the time allowed, he receives a bonus of 20 per cent. If he finishes in less than the time allowed, he gets paid for the time that was allowed plus a bonus of 20 per cent of the time actually taken. If it takes him longer than the standard time to finish the task, but not more than half again as

long, he gets a bonus that is based upon his percentage of efficiency, figured according to the ratio of the time allowed to the time taken.

Another plan, the Bedaux Point System, is based on the quantity of work that can be produced in one minute, with a standard production for an eight-hour day. The amount of work that is produced in one minute is called a "point." In an eight-hour day the worker should produce 480 points. The worker gets a day's pay, anyway, regardless of his output, but, if he turns out more than 480 points in an eight-hour day, he gets a bonus amounting to three-quarters of the time saved, at the regular rate. A worker receiving $4.80 for an output of 480 points would receive, for an output of 600 points in eight hours, an additional 90 cents, which is 75 per cent of the additional output of 120 points. The other one-fourth is put into a pool and divided among the supervisors and others who are not paid on a production basis, but who are responsible indirectly for helping to bring about increased output.

In Fig. 17 a comparison of various wage plans is shown. The method of maintaining a record of the performance of employees is indicated by the form shown in Figs. 18a and 18b.

When the management has a thoroughly-scientific method of rating the employees, it may be desirable to give an additional bonus to those who have the highest "ratios."

Certain plans of this kind appear rather compli-

Name of System	Based on Standard Conditions	Basis	For an Hourly Rate of	Bonus	Pay if Finished in 8 Hours	Pay if Finished in Standard Time (6 Hours)	Pay if Finished in 4 Hours
Halsey	No	Pays for time worked at regular hourly rate	$.40	50 per cent of time saved, at hourly rate	8 × .40 $3.20	6 × .40 $2.40	4 × .40 = 1.60 1 × .40 = .40 2.00
Taylor	Yes	Pays low piece-rates up to 100% task and high piece-rates above 100% task	$.30 low* .50 high	Pays high rate for finishing in standard time or less	6 × .30 $1.80	6 × .50 $3.00	6 × .50 $3.00
Merrick	Yes	Pays basic piece-rates up to 83% task, medium rates to 100% task, high rates above 100% task	$.40 low* .44 interm. .48 high	10 per cent if within 83 per cent of standard time. 20 per cent if in standard time or less	8 × .40 $3.20	6 × .48 $2.88	6 × .48 $2.88
Gantt	Yes	Pays for time worked at regular hourly rates up to 100% task, and high piece-rates above 100% task	$.40	30 per cent if finished in standard time or less	8 × .40 $3.20	6 × .40 = 2.40 30% = .72 3.12	4 × .40 = 1.60 2 × .40 = .80 30% = .72 3.12
Emerson	Yes	Pays for time worked at regular hourly rates, and a series of empiric bonuses from 67 to 100% task. Thereafter 1% bonuses for each 1% gain in efficiency	$.40	20 per cent if finished in standard time	(for 9 hours) 9 × .40 $3.60 (no bonus)	6 × .40 = 2.40 20% = .48 2.88	4 × .40 = 1.60 2 × .40 = .80 20% × 1.60 = .32 2.72

* Assumed hourly-rate equivalents. Pay actually based on piecework.

Figure 17—Comparison of Wage Plans

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER

Male
Female

EMPLOYEE'S RECORD

Dead File
Active File

Name..... Born.....

Address..... Phone No.....

Living with Parents?..... If not, why not?..... With Whom?.....

Married?..... How Long?..... Number of Children.....

Education { Public School / Parochial School..... Business School.....
High School..... College.....

Previous experience (Enter in chronological order beginning with last position held)

Employers	Addresses	Business	Position Held	Term of Employment	Salary

REVISION OF EMPLOYMENT APPLICATION

Is or is not attending night school—19..... 19.....

Is taking up—19..... 19.....

Is or is not following definite course of reading—19..... 19.....

Following outside activities—19..... 19.....

Would like following position better than one now held—19..... 19.....

Remarks.....

FIGURE 18a—EMPLOYEE'S RECORD

EMPLOYEE'S RECORD

STARTED.....

DEPARTMENT.....

POSITION.....

SALARY.....

RESIGNED / DISCHARGED } DATE..... REASON.....

.....

MONTHLY SERVICE RECORDS

Months	MERIT AND DEMERIT						ATTENDANCE						SUGGESTION					
	19			19			19			19			19			19		
	Merits	Demerits	Bal.	Merits	Demerits	Bal.	Days Absent	Late: No. Times	Late: Amount	Days Absent	Late: No. Times	Late: Amount	Quantity turned in	Number Awarded Prizes	Am't of Prize Money	Quantity turned in	Number Awarded Prizes	Am't of Prize Money
JAN.																		
FEB.																		
MAR.																		
APR.																		
MAY																		
JUNE																		
JULY																		
AUG.																		
SEPT.																		
OCT.																		
NOV.																		
DEC.																		

INTERVIEWS.....

.....

REMARKS.....

.....

FIGURE 18b—REVERSE SIDE OF EMPLOYEE'S RECORD

cated to those for whose benefit they are arranged. Every effort should be made to avoid such complications, because, the more complex the plan of compensation, the more unsatisfactory it becomes to the employee.

6. *The administrator's problem.*—Two points must be kept in mind in the installation of any wage system based on output:

(a) The operation should be studied thoroughly to make sure that the standard output is not set too low
(b) After the standard has been set, the rates never should be cut unless there is a radical change in the process

As soon as the rate is cut without a definite change in process, the confidence of the workers is undermined.

The straight salary basis is the most widely used of all the numerous ways of compensating office employees. It is the easiest to set, and the simplest to administer. Unless this plan is carefully and conscientiously administered, however, salaries will vary among employees doing the same type of work, or among employees of the same rank. The administrator should endeavor to avoid any favoritism when he increases the salary of one office worker without increasing that of others.

A compensation plan based on output is more difficult to administer, but it generally results in fairer compensation to employees of equal rank. It also

provides a greater incentive to the ambitious and competent worker. No definite and wholly-satisfactory plan can be adopted in a scientifically-managed office until a painstaking study has determined the best method for that particular company.

Those who are entrusted with responsibility for recommending increases in compensation, in any form, should have an intimate knowledge of the history of each worker and his record with the company. A register should be kept which contains all facts that have any bearing upon his caliber, his accomplishments, and his worthiness of promotion or transfer. In Fig. 16 is shown a typical record card for this purpose.

REVIEW

State the two bases employed for the financial compensation of office employees.

Outline the advantages and disadvantages of the salary plan.

Describe the procedure suggested for standardizing salaries and granting increases.

Explain the advantages and disadvantages of paying office employees on the basis of output.

Mention two special wage-incentive plans and state the fundamental procedure followed in each of these plans.

CHAPTER XVI

PERSONNEL RELATIONS

1. *Preliminary considerations.*—The office manager is concerned with three general factors—the office equipment, the materials and supplies used, and the office employees. By careful selection and efficient arrangement, he reduces to a minimum the expenditure of energy, and the motions necessary, in the use of the equipment. By the standardization of materials, he eliminates unnecessary variations in kind and quality that may have an effect upon office output. By job analysis and intelligent selection of workers, he provides the potential ability to do the work that is to be done. Through proper and effective methods of salary administration, each worker receives the compensation to which he is entitled, as indicated by his grading and by his output.

Two other factors of importance remain:

(a) The provision of stimuli, or incentives, to continued effort on the part of the employee
(b) The provision and maintenance of desirable working conditions

The first factor will be discussed in the present chapter, and the second in a succeeding chapter.

2. *Why incentives are needed.*—Why should well-paid office workers need any further incentives than the money they find in their pay envelopes at the end of each week? Why do they get up early, commute long distances, put up with inconveniences in transportation, work continuously for several hours broken only by a brief lunch period, and then take the long trip back home again—only to repeat the performance day after day? If the earning of one's living were the only reason for the daily round of routine, little progress would be made, either by individual workers or by organizations of workers. There must be something more than money, vitally important as that is, to keep them at their tasks, day in and day out. That "something" is the pleasure or satisfaction which they derive from their work. Money and happiness are the compensations. Without happiness, the task becomes mere drudgery. An employee who receives money alone for his services, soon makes up his mind to find other work that he likes better.

The unsatisfied craving for something better, or in many cases simply *something different,* often is at the bottom of an employee's withdrawal. Every worker is apt to experience this craving to some extent. Economists call it the "irksomeness of labor." The amount of satisfaction that one derives from his work varies inversely with the irksomeness of the work. The satisfaction of having completed the task may be great, while the amount of happiness felt while

doing the work is small. Thus, the problem of the administrator is to ascertain what measures can be taken to increase the employee's interest in his work, to reduce the irksome nature of the work, and to increase the sum total of happiness which he can derive from it. The returns to the employer are apparent in:

(a) The increased output at maintained rates of flow
(b) A lessened turnover of help
(c) A reputation, in the community, of maintaining "a good place in which to work"

Such an employer need fear no ill results from competition, other things being equal.

3. *The feeling to be created.*—Assuming desirable working conditions to be a necessary foundation, what other conditions are essential? First, an administrator should aim to have his employees feel that they would rather work for his company than for any other; to have them believe in the company, in its products or service, in its business methods; and to have them take pride in "belonging," and in working for the organization. "Our company," "our product," "our office," "we did this," or "we did that," are phrases indicating enthusiasm for the concern. Confidence is essential to enthusiasm: confidence in the firm, in its product, in the management, and particularly in those executives who represent the management, or the company, to the rank and file of employees. To secure confidence, and keep it, the company's policies must be worthy.

The acts and utterances of an executive are analyzed by his employees, whether done or said directly or indirectly. If he expects to retain the confidence of his workers, he must exert the utmost care to be circumspect in his actions and in his speech. To the employees he represents the company, and, therefore, what he does and what he says has a wide influence and marked effect on the staff.

The administrator must furnish incentives that will secure and hold the confidence and loyalty of his staff, that will arouse enthusiasm, and that will build up and maintain an aggressive spirit on the part of the entire organization.

4. *Basic requirements.*—Good working conditions are required in the office, and qualifications for leadership are necessary on the part of the manager. The ability to organize individual workers into effective units is of vital importance. Workers so organized and directed feel that the manager "knows his stuff." Results are immediate. An absolutely impartial administration of justice is essential. No favoritism, no partiality, and an absence of office politics are conditions important for the development of sound morale. "Team spirit" is a fundamental factor in a successful office. Each worker should feel that the individual benefits in proportion to the general success of the whole organization.

5. *Other incentives.*—There are several other incentives to be kept in mind. These incentives, tabulated in the following list, will be discussed briefly.

(a) Establishing fair standards
(b) A challenge to accomplishment
(c) Competitive contests
(d) Recognition of meritorious accomplishment
(e) Staff meetings and conferences
(f) Organized committee activities
(g) Participation in management responsibilities
(h) Prompt and fair handling of complaints
(i) Private talks with disaffected individuals
(j) Recognition and encouragement of worthy aspirations
(k) Fair transfer and promotion policies
(l) An adequate vacation policy
(m) Privileges regarding "time off"
(n) Sick leave and sick benefit
(o) Financial assistance in emergencies
(p) A well-organized suggestion system
(q) Educational opportunities
(r) Personal facilities
(s) Opportunities for social contacts
(t) Company publicity

6. *Establishing fair standards.*—A standard is something to strive for—a measure by which to gage accomplishment. The stimulus of striving is surpassed only by the zest of accomplishment. But there is no enjoyment in attempting to attain the unattainable. If the standard of accomplishment is too high, so that none can reach it, enthusiasm soon turns to discouragement, then to dissatisfaction.

Challenging a group, or an individual worker, to unusual accomplishment often has striking results. Few men can resist a challenge when the goal is worth while.

Competitive contests between groups carry the

principle of the challenge still further. Such a challenge need not be openly expressed. Charles M. Schwab once pitted two groups of steel workers against each other by the simple expedient of marking on the floor the number of heats the previous group had finished. The challenge may take the form of a carefully-managed contest, arranged under circumstances that will bring out the best effort and, at the same time, not carry the rivalry so far as to create ill-feeling among the contestants. The urge to outdo competitors easily may lead to rash or unwise steps unless carefully controlled.

When an individual worker or group has accomplished something out of the ordinary, the least that can be done is to recognize this accomplishment, through a commendation, a prize, a reward, or some other form of appreciation that will make those concerned feel that the effort was not in vain. The worker has a strong incentive to further effort if he is recognized by higher authorities as having accomplished a task beyond the ordinary, especially if the recognition is extended in the presence of his fellow-workers.

7. *Staff, committee, and management activities.*— The opportunity to express one's opinions may be provided in meetings where the worker has a chance to offer suggestions. Staff meetings provide this privilege. If intelligently planned and conducted, they are valuable in bringing out new ideas.

The same benefits result from committee activi-

ties. The privilege of being on a committee, with the recognition that such membership makes evident, often acts as an incentive. Whoever is in charge of committee meetings, however, should be careful to see that they do not turn into mere debating contests. A prepared agenda should be adhered to rigidly and a determined effort made to see that the results are crystallized into a program of accomplishment, with definite assignments to those who are to carry out that program.

The part played by the worker in management activities may range from a simple conference with an executive to an actual supervisory or executive position. Many workers like to feel that they have a hand in what is going on.

8. *Dealing with the individual office worker.*—To a person making a complaint, the subject of that complaint, at the time, may be the most important thought in the complainer's mind. Hence, the administrator should give immediate consideration to all complaints made by employees, and to the prompt adjustment of grievances. If an employee feels that anything that may go wrong will be corrected immediately and fairly, he is bound to have greater confidence in the management.

Often a heart-to-heart talk with an employee, who does not seem to be getting along well, will help to bring out the causes of the difficulty. Where dissatisfaction exists, the trouble may be only trivial or imaginary, but it should be cleared up.

Some employees have unlimited ambition while others cherish only modest hopes. If such hopes are worthy, they should be encouraged. If an administrator deliberately kills the rightful hopes of his subordinates, he must be prepared to take the consequences.

9. *Transfer and promotion policies.*—A strong incentive toward conscientious performance of tasks is offered by fair policies of promotion and transfer under which everyone is treated with absolute impartiality. The administrator should take steps to safeguard the fairness of the promotion policy. Advances in position should be made strictly according to merit, unless the promotion is part of a general plan to develop the organization through the routine advancement of selected workers who have been brought in for a definite purpose, such as to "learn the business."

With respect to the transfer of employees, certain factors should be studied. One of three outstanding reasons usually underlies a request for transfer. The most frequent reason, but one that seldom is openly expressed, is a dislike of the supervisor of the group. A second, also usually not expressed, is a dislike of one's associates. The third, and probably the most-frequently-given reason, is a dislike for the work itself. The office worker, like workers in other occupations, often feels that the grass is greener in the other fellow's yard. Whatever the reason advanced, it should be given due consideration, and the worker

should be convinced that his request is dealt with in a sympathetic and just manner.

10. *Vacation, "time-off," and sick-leave policies.*— More and more attention is being given to the subject of vacations. From the employer's point of view, the purpose of arranging vacations for employees is to enable them to get a thorough rest and return to the office better fitted to resume their duties. From the employee's point of view, however, a vacation is something to which he looks forward and to which he considers himself entitled because of his employment. For this reason, many employers who release an employee (for reasons other than those warranting immediate discharge) feel obliged to pay the outgoing employee an amount of money equivalent to that part of his usual vacation period which has been earned up to the time of leaving. The minimum vacation that most corporations now grant to their office employees annually is one day for each month of service, up to twelve working days. The maximum may be extended to as long a time as a month, by special allowances for length of service, regular attendance, or other factors that it may seem proper to recognize.

During the course of the year, a number of occasions may arise when an employee would like to be away for a day, or part of a day. It frequently is inconvenient to grant such requests. Nevertheless, it should be kept in mind that the privilege of getting such "time off" is one that is highly valued. If

the administrator can establish a system of rewards involving the giving of time off, he will find the plan to be a powerful incentive to his employees.

Closely allied with vacations and "time-off" plans is the provision for sick leave. When an employee is sick, his expenses increase. Some concerns not only continue the employee's salary during the period of illness, but also provide a supplementary income by means of health insurance. Just how long a sick employee should be carried upon the payroll will depend largely upon the individual circumstances. It is impossible to fix an arbitrary rule covering this contingency.

11. *Financial assistance and suggestion awards.*— If it is found that some worker is in financial trouble, an inquiry into the emergency, and the giving of assistance, perhaps in the form of a loan, will be found helpful.

Excepting the management engineer, probably there is no one in a better position to suggest improvements in the office activities of a company than the employees who actually are handling those operations. To encourage suggestions from the rank and file of employees, it is desirable to adopt a suggestion system. A locked box placed in a conspicuous location, into which employees may drop their suggestions, perhaps written on unsigned blanks with key numbers on the forms for later identification, almost always will bring desirable results. Cash awards and prizes should be offered for employees'

suggestions that are accepted. The practice of giving the employee a certain percentage, say 10 per cent, of the first year's savings due to suggestions he submits is worth consideration. No suggestion plan can succeed without adequate rewards.

12. *Educational and other opportunities.*—Educational opportunities offer a strong incentive. They will be discussed in a later chapter in connection with employees' welfare and service.

It should be remembered, too, that the sole use of anything is a privilege which usually is appreciated. One company, for example, furnishes a coat-room hanger and hook for each employee, with his name clearly printed on a label above the hook. Many other devices of a similar character can be developed readily.

Opportunity for self-expression in a social way may be of relatively little importance as an incentive, but it should not be overlooked. Most workers like to feel that they are members of the social group and that they may take part in its activities.

13. *Company publicity.*—The dissemination of information about the company's affairs usually is productive of beneficial results. It answers questions which may be in the employees' minds but which they may not feel justified in asking. The one who prepares the information always should be on the lookout to explain matters which the workers may have misunderstood or misinterpreted and to repudiate false rumors that may be circulated about company

policies. A concern that is careful to broadcast in this way information that can and should be revealed invariably receives closer coöperation from its workers.

14. *Considerations of vital importance to the administrator.*—A man can work harder and longer when doing something that he enjoys than when engaged in an uninteresting task. The problem of the administrator is to make all of the work enjoyable to his employees. Needless to say, some duties are much less interesting than others. In this connection, however, there is a point which warrants consideration. The fact is that advertising agencies never yet have found any commodity or service which they cannot *make* interesting. This thought may point out to the administrator the possibility of developing methods whereby he can *make* his own business more interesting to his employees.

Among the basic requisites for success in maintaining an effective office organization are:

(a) Good working conditions
(b) Qualifications for successful leadership
(c) Organizing ability
(d) Impartiality
(e) Team spirit

Based on these factors are at least a score of incentives, the purpose of which is to make the worker's effort of more inherent value to himself and to the company. To obtain the best results, there must be an underlying current of sincerity throughout. The

day when employees could be misled has passed. When they recognize insincerity, they at once lose interest in their tasks. Interest once lost is difficult to regain.

REVIEW

Explain why incentives beyond mere salary are effective in stimulating the efforts of office workers.

State the basic requirements that must be met in establishing sound personnel relations.

List ten methods by which incentives may be effectively offered to employees.

Explain how staff, committee and management activities afford employees opportunities to become more interested in their work.

Outline the important considerations in a transfer and promotion policy.

Describe the vacation, "time-off," and sick-leave policies of some office with which you are familiar.

Comment on the value of a suggestion system.

In what way may publicity be utilized by a company to assist in building morale among employees?

CHAPTER XVII

EMPLOYEES' SERVICE

1. *Helping employees to help themselves.*—Some administrators feel that when the proper equipment is provided, and the employees are carefully selected, supervised, and compensated, the management has done its duty. However, the more progressive administrators have found that there are certain "employee services" which, if properly introduced and administered, leave tangible benefits in their train. Such services may not have a direct bearing on the office work, but their influence may affect the office personnel quite markedly.

Some of the employee-service activities have been classed as "welfare" work, because they have a direct relationship to the well-being of the personnel. Prior to the period of the World War, in fact, plans of this kind bore strong evidences of "patronage" toward the employee. The worker resented such an attitude on the part of the management and, consequently, refused to respond to a program that took away much of his feeling of individual independence. In many cases, he looked upon the benefits extended as an attempt to substitute service activities for adequate pay.

The term "employees' service" has taken on a different meaning. The measures adopted are those that help employees to *help themselves,* whether physically, mentally, socially, or financially. The best results usually are obtained by letting the employees administer these service activities themselves, with only such advice and assistance as they may desire or as may seem advisable to the management. The administrator should be very careful to avoid allowing anything to be done that has the appearance of paternalism, an attitude most distasteful to all workers. A report of the Personnel Administration Committee of the National Office Management Association has this to say on the subject:

> The extent to which the so-called welfare activities are made a part of the personnel administration plan can be decided only by the circumstances or conditions faced by the individual company. It is generally conceded, however, that many things which come under this general head can better be handled by an association composed of the employees themselves, and in which they have a voice in the management. Such activities should be free from the paternalistic attitude if any great amount of good is to be accomplished. American men and women, as a class, resent the suggestion, however delicately it may be made, that they are not capable of managing their own personal affairs. It is a well-known fact, however, that many of these people are not; and that they require help in cases of emergency. This help should, however, be given only when solicited and not forced upon the workers.
>
> Many mistakes have been made by organizations which have too zealously attempted to manage the personal affairs of their people, particularly with reference to the matter

of compulsory savings and similar activities. No harm can come from the offering of facilities such as savings funds, pensions, stock subscriptions and other plans, but participation in them has generally been found to give the best results when on a voluntary basis. The paternalistic attitude of the company toward its employees is not inclined to develop the character of the workers, as they are taught to place their dependence in others rather than in themselves. We as individuals must live our own lives and assume full responsibility for our actions. We are entitled to full compensation for our services, such compensation to be spent or saved at our own discretion. Welfare work should, therefore, be approached with caution, otherwise more harm than good is likely to result.

2. *Encouragement rather than participation.*— General encouragement rather than active participation should be the rule with the administrator. The development of a group consciousness may well represent the first step in establishing the welfare service. Once this is under way, the possibilities are almost unlimited. Natural leaders will develop among the employees, leaders who can be depended upon to instigate and put into effect such activities as may seem desirable for the rank and file. Each employee must make his own decision as to whether or not he will participate. No coercion should be exercised. The management must tread very lightly, lest its motives be misunderstood and lest suspicions be aroused as to the sincerity of the welfare undertaking. It is very easy to create the impression that things are "inspired" by the management for the purpose of furthering its own ends.

3. *Employees' house organ.*—Another important factor in employees' service activities is the house organ, or company magazine. Every person is interested in what is going on in the organization with which he is connected, especially if it affects him or his associates. News, stories, anecdotes, cartoons on current happenings within the concern, and information regarding the company's activities are all read with deep interest. Each employee likes to see his own name in print, particularly if he has done something that deserves special commendation.

Part of the compensation of any accomplishment is the recognition by others of that accomplishment. A successful house organ has the opportunity to present the everyday office happenings in simple homely language, often enlivened by a sense of humor. The eagerness with which the members of the organization look for news items about themselves and their friends is surpassed only by the desire to do something that will deserve editorial mention.

In the hands of a skillful editor, the house organ can arouse a spirit of emulation and friendly competition. However, every bit of interest in such a magazine can be destroyed instantly by evidences of "tampering" on the part of the management. This does not mean that the management should not have any part at all in the publication. The employees are interested in management activities as well as in their own. But the important point is to introduce the subject of management activities in such a way

that the impression will not be conveyed that the management is trying to "put something over."

The establishment of an employees' house organ, following the proper building of a group consciousness, is likely to be one of the initial steps in the development of employees' service. This magazine need not be elaborate; it need not even be printed. A few mimeographed sheets will serve the purpose in the beginning. The employees themselves should have charge of the preparation. A name should be selected which has a definite appeal. The paper should be circulated among all the employees. At the outset, news items and "personals" usually constitute the major part of such a publication. When other items seem desirable, the number of pages should be increased, but the "personals" should not be decreased. Upon the personal items the real success of the paper probably will depend.

The house organ will provide an effective medium through which employee activities, past and forthcoming, may be given full publicity. It can be made a power in developing the group consciousness that is so very vital. It will stimulate teamwork as well as bring about a better understanding between the management and the workers. Through its pages the management can keep the workers fully informed of company developments. This policy of giving information to the employees explains many doubtful points and heads off harmful rumors.

4. *Supervised bulletin boards.*—The best substi-

tute, in case an employees' house organ cannot be established, is a system of bulletin boards. If the bulletin boards fail to function properly, the reason is that they are not regularly kept up to date. If the employees become accustomed to seeing bulletin-board notices of events which took place several days or weeks before, they soon will pay little attention to the board.

An effective bulletin board will have provision for three distinct types of material:

(a) A section for material such as instructions, special notices, and so forth, that must remain on the board for some time
(b) A section for which the employees themselves are accountable and on which any announcements may be posted by them
(c) A section for current notices and bulletins

Each notice that is posted should bear the date of posting and the date of expected removal. The bulletin board should be scanned each day by the person responsible for its care. He should remove all notices that have fulfilled their purpose. Those notices that have a more permanent value should be placed in the current section for the first few days and then transferred to the section especially made for such notices. In this way, the attention of the employees will be fixed upon the current section and they will look continually for new notices there.

5. *Savings-and-loan associations.*—Another activity that is helpful in almost any office is the organiza-

tion of what usually is known as a "savings club," "savings-and-loan association," "thrift society," or "thrift club." This type of organization has two major purposes:

(a) Making it possible for employees to borrow small sums of money to meet unexpected expenses, without having to ask for advances in salary
(b) Fostering the thrift idea

An organization of this type relieves the management of making salary advances, which it might hesitate to grant in doubtful cases, and places the decision regarding loans in the hands of the savings association. A committee selected by the employees themselves can give the matter the fairest consideration. As a rule, when a loan is made, it is repaid to the fund in nominal weekly or monthly amounts, with a fair rate of interest.

The thrift society or savings fund furnishes a valuable opportunity to the employee who saves money, or who has an inclination to do so. He may deposit a stated amount each pay day, and at the end of the year, or whatever period is determined upon, he may withdraw his deposit plus the share in the earnings of the society to which the deposit entitles him. The fund is beneficial not only to the employee who saves but also to the one who borrows.

Some companies make substantial contributions to the society from the company's profits, to encourage their employees to save money. These contributions have been as high as a dollar for each dollar deposited

by members of the club. Of course, the maximum amount which each member may deposit is strictly limited, in order that the higher-salaried employees may not monopolize the benefits to the exclusion of the lower-salaried members.

6. *Insurance.*—The various plans of insurance that have been instituted for employees of business concerns are closely related to the savings-and-loan funds. Insurance plans may provide for death benefits, sick benefits, or both. If the plan in force is operated as a company program, it may be administered wholly or in large part by a committee of representative employees, or by the employees' association if one has been formed. The company may support the entire plan, or the employees may pay limited premiums supplemented by corresponding contributions from the company.

In many cases, group insurance for employees is carried with one of the regular insurance companies. As a rule, under the terms of the group contract, a service of from six months to a year is required before an employee comes under the insurance provision. The individual policy may range from $300 to one full year's salary of the employee insured. The company may pay the entire expense, or employees may bear a part of the cost.

In cases of illness many companies pay office employees their full salaries at least over a limited period of absence. Where sick benefits are provided through a company insurance fund, the payments

are made in full, in some cases for, say, thirteen weeks. After that, payments may be made either in full or at half-rate for another thirteen weeks, the method depending upon the policy of the individual company. If the sick benefits are a part of the contract with a regular insurance company, the employee may receive his full salary from his employer and an additional weekly sum from the insurance company, starting as early as eight days after his absence begins. Payments run for thirteen or twenty-six weeks, according to the kind of policy carried. Dismemberment insurance may also be carried, with specific payments for specific injuries, received either in performance of duties, or on the street, or in the home. Accident insurance, aside from dismemberment, is not a part of group insurance contracts.

7. *Personal and legal advice.*—The furnishing of personal and legal advice to company employees has not received the attention that it deserves. It may be impracticable to provide free legal advice in all instances, but it should be possible to arrange with the company attorney to furnish such advice at least for certain types of cases. No employee can do his work well while worrying about personal matters. For that reason, an alert office manager will make himself available to all office employees in such a way that they will feel free to consult him on any personal matter. He probably is in a better position than almost anyone else to know exactly what should be done under the circumstances. If he cannot an-

swer the question himself, or solve the problem, he can suggest someone who is qualified to do so. A sympathetic understanding on the part of the office manager will go far toward developing a feeling of confidence and loyalty among his subordinates.

8. *Coöperative purchasing.*—Coöperative purchasing by company employees seems to have waves of popularity. The possibilities of such a plan, including the facilities of the company's store, if one exists, are so varied and have such a wide range of application that it hardly is feasible to discuss the subject in detail in this Text. However, its application, whether in large or small groups, presents opportunities for very definite saving on the part of the participants.

In many cases, particularly in manufacturing plants, the company allows employees to buy items from its regular storeroom at cost price, with perhaps a certain percentage added for handling charges. In other cases, the company carries, in the storeroom, items that are intended for employees' consumption, and allows the workers to buy them at less than the retail prices. Some companies will buy special items for employees upon request, and will give them the benefit of the company discount from the vendor. A number of retail concerns now supply discount cards to companies in their localities, and these cards are given to those workers requesting them. Upon presenting these tickets the employees receive discounts, usually from six per cent upward, when mak-

ing purchases from the particular retailers. These privileges are appreciated by the employees, who thereby secure many desired items at unusually favorable prices.

9. *Eating facilities.*—The necessity or desirability of providing eating facilities is subject to some of the restrictions that pertain to coöperative purchasing. Accessibility to desirable eating places where wholesome food can be obtained at reasonable prices, ordinarily makes unnecessary any special provision for employees' restaurants or lunchrooms. The management of a company restaurant is a highly-specialized occupation, and only a specialist should be permitted to handle it. Such a specialist should be a trained dietitian having the ability to manage restaurant employees. The handling of food may be attended by considerable extravagance and waste. The company restaurant sometimes proves to be an expensive proposition unless carefully supervised; yet there are occasions when it is highly desirable.

10. *Club rooms and reading rooms.*—Whether or not club rooms, reading rooms, and so on, shall be provided will depend upon the need for such service. Any office that has a considerable number of women among its employees will find a properly-equipped rest room a valuable adjunct. Such a room should be located in a quiet spot, and should provide real rest facilities.

Sometimes the staff for a rest room consists merely of a matron. In other cases, it may include a nurse

and even an attending physician. The amount of clerical time that may be saved by prompt attention to minor health disturbances often will more than compensate for the expense involved in this respect. The chance to lie down for an hour may obviate the necessity of sending a woman employee home for the rest of the day. A slight cut promptly attended to may prevent a seriously-infected wound later on.

11. *Health protection.*—Other measures of health protection include the possibilities of home-nursing or visits by the company nurse, attention to sanitation, and the provision of pure, cool drinking water in sufficient quantities. Some administrators have found that lectures by local health authorities are beneficial, particularly if most of the office employees are very young. The house organ provides a medium for disseminating health information. This is particularly important in times of epidemic. It always is easier to prevent sickness than to cure it—and, from the point of view of the administrator, much less expensive. Other closely-allied activities are concerned with fire prevention and accident prevention.

12. *Educational work.*—The provision of educational facilities in all probability will depend upon the accessibility of the office to educational opportunities offered by outside organizations. Frequently, the management finds it feasible to inaugurate evening classes conducted at the office, or to arrange with near-by educational institutions to give instruction in desired subjects. In such cases, the company may

pay for the entire tuition of its employees, or it may pay for only a part of the cost. Excellent correspondence courses in practically any subject desired are available. The company may arrange to furnish these correspondence courses to its employees, or it may establish local discussion groups where the content of a given course may be discussed and where special speakers may deliver appropriate talks from time to time.

Many administrators have found it to be of great value to present to their employees, in group meetings, fairly detailed descriptions of the work of the different departments of the company. Such descriptions ordinarily are made by the department heads and are illustrated by charts, diagrams, and blackboard work. The object is to increase the knowledge and capacity of those who attend the meetings. If the company is a manufacturing concern, films illustrating the making of the products of the company are of great interest to all of the employees. Every opportunity should be taken to help the employee to feel that there is no company like the one for which he is working. The more he knows about what the company is doing, about its prosperity, about its position as compared with other companies, and about its general reputation, the more he feels that he is a part of it and the prouder he is of being a part of it.

13. *Library.*—The establishment of a company library depends largely upon the requirements of the

executives and employees in relation to reading matter. Such libraries usually develop from small technical collections or from subscriptions to a few magazines. The operation of such a unit may vary from the minor attention given to it by a secretary to one of the executives, to the employment of a full-time librarian and the establishment of regular library facilities. In a small organization, the active circulation of magazines among interested members has been found to be beneficial. The simple use of a circulation slip bearing the names of those to whom the magazines are to go, and the order in which they are to be routed—with an injunction not to clip the magazine until circulation has been completed—will be found decidedly helpful.

14. *Recreational opportunities.*—The location of the office will have some bearing upon the desirability of providing recreational opportunities. These provisions may range from noon-hour activities to regularly-established athletic teams and contests. The wishes of the employees should be a guide to the office manager in making such provision. The same is true with respect to office picnics, dances, and other parties, the establishment of musical organizations, and so on.

15. *Prevailing working conditions.*—Although there is no widespread agreement between business firms, even in definite localities, regarding office working conditions, various surveys have disclosed certain practices that seem to be frequently followed,

even though not always representing the best practice. Some of the conditions indicated by such surveys are as follows:

(a) Hours of work, and remuneration for services

(1) *Office hours.* In large cities, most offices open at 9 a.m. and close at 4, 4:30, or 5 P.M. For offices closing at 4, the lunch period is about 35 minutes, for those closing at 4:30 it is usually 45 minutes, and for offices closing at 5 o'clock, the lunch period is usually an hour. Lunch hours are often staggered. Thus, some offices will start their lunch hours at 12 and some at 12:30. In offices where there are company dining rooms or cafeterias, as in the large insurance companies, employees take their lunch hours by departments, starting at about 11:30 and ending at 1:30 or 2 o'clock. In smaller towns, the offices usually open at 8 and close at 5, with an hour for lunch, often from 12 to 1. Saturday closing hours usually are at 12 noon in offices that open at 8 a.m., and 12, 12:30 or 1 for offices that open at 9 o'clock.

(2) *Summer hours.* In summer, some office organizations follow the practice of closing on Saturdays and making up the time by adding about three-quarters of

an hour to the working hours of each of the other days. If the office has a lunch period of one hour, it may be cut fifteen minutes and the afternoon closing time may be moved back a half hour. In manufacturing plants, if the shops work on Saturday mornings, the offices usually are open.

(3) *Five-day week.* The five-day week has been adopted by a number of companies, and offices in these concerns follow the five-day working schedule. Very few of the financial, commercial, and other business offices, however, follow the five-day week plan.

(4) *Time clocks.* Time clocks have been installed in some offices, principally those connected with manufacturing plants. Usually only the clerical help is required to ring-up on these clocks. Many offices rely on department heads to check the promptness and attendance of office workers.

(5) *Lateness.* Prompt attendance is a requirement of employment in most offices. Certain offices offer rewards in the form of bonuses, half-days off, or other privileges, to employees who are not tardy during definite periods, say a week or a month long. Other offices, in which

workers are on an hourly basis of pay, penalize the employee when calculating the payroll, by deducting fifteen minutes or a half hour from his time for each tardiness. Most offices rely upon ordinary disciplinary measures to reduce tardiness.

(6) *Overtime.* Few offices pay for overtime, unless workers are on hourly rates. In practically all offices, the clerical help is expected to be willing to remain occasionally to handle rush jobs, and if the work lasts until over two hours supper money usually is allowed, varying from 75 cents to a dollar and a half, according to locality.

(7) *Absence.* Office workers usually are paid for the time they lose due to sickness or other unavoidable causes, but under restrictive plans. Thus, when ill, those who have been employed one month may receive one day's pay; one to six months, one week's pay; six months to a year, two weeks' pay; over one year, one month's pay. Employees are compensated for absence on account of National Guard duty and jury service, sometimes in full and sometimes for the difference between their regular pay and the amount that they receive for these services. Time taken for appointments with doctors and

dentists usually, if by permission in advance, is not considered as lost time, and is not deducted from salaries. Absentees are required immediately to send word to the one in charge of their work.

(8) *Leave of absence.* When office employees desire to absent themselves from work for long periods, due to extended illness, extended vacation trips, or other causes, it is customary to grant them leaves of absence without pay, if their records are satisfactory, if the condition of the work permits, and if the department head wishes them to return.

(9) *Time off.* As a concession for the occasional necessity of holding office workers after hours to clean up rush jobs, some companies grant employees a half day or day off, or allow them to leave early, when they have some personal plan errand to perform. Some organizations make provision for granting time off to employees as an added incentive to promptness and regularity in attendance, allowing perhaps one hour "earned time" for each two weeks of perfect attendance, and permitting this earned time to accumulate until a half-day or a whole day may be taken.

(10) *Holidays.* The usual holidays granted to

office workers, with pay, are New Year's Day, Washington's Birthday, Memorial Day, Fourth of July, Labor Day, Thanksgiving and Christmas. Banks, insurance companies, brokers' offices, and similar establishments often observe, in addition, Lincoln's Birthday, Good Friday, Columbus Day and Armistice Day.

(11) *Vacations.* Practically all offices grant vacations, with pay, to workers. July and August are set aside, as a rule, as vacation months. Many companies start the vacation period on June 15 or even June 1. Some concerns extend the period to September 15 or 30. In special cases, employees may be allowed to take their vacations in early spring, or late fall or winter, but rarely are allowed even to carry one year's vacation over into the next. The Saturday preceding the vacation period sometimes is added, and an extra day may be allowed in cases where a legal holiday falls within an employee's vacation period. Employees who have joined the company within six months prior to the vacation season are often given one day for each month of service; those with over six months' service, one or two weeks' vacation; twelve months or over, two weeks. Some companies add

to the vacation allowance a day extra for each year of service beyond a certain minimum. The maximum vacation granted, with pay, is usually one month.

(12) *Salaries.* Salaries of office workers are based on a weekly or monthly period, with payments made each week, semimonthly, or monthly. Payment is usually in cash, for weekly salaries, and by check for those on a semimonthly or monthly basis, after a certain sum has been reached. The average time between salary increases is from six months to a year, the annual increase plan being the most common.

A survey by the Merchants' Association of New York, covering office salaries in banks, insurance companies, publishing houses, and advertising agencies, indicates divergences of over 100 per cent between the rates of pay for workers engaged in similar work in different companies in the same field of business. The normal divergence appears to be between 40 and 60 per cent. Maximum salaries often are about 50 per cent higher than minimum salaries on the same job.

(13) *Pay days.* Weekly workers are paid on definite days each week. Saturday is

usually avoided as a pay day. In some cases payment is made on Friday for the current week. Where deductions are made for absences, the Tuesday of the week following is sometimes selected as the pay day, to give time to calculate the payroll. Workers on a monthly salary basis may be paid on the last day of the month, or on the fifteenth and the last day.

(b) Rules and regulations

(1) *Office manuals.* Office regulations, and guides and information for employees are covered in manuals in many of the larger offices. In smaller offices where few workers are employed, the regulations usually are established by practice and are verbally communicated to new employees. They are supplemented by occasional bulletin-board, or circulated, notices.

(2) *Personal appearance.* Manner of dress is no longer specified in most offices. Extremes in dress are discouraged. Men sometimes are permitted to go without coats and vests in warm weather. Rules for personal conduct are few, a general policy on office discipline being sufficient. Smoking, except in certain designated rooms, usually is prohibited in office de-

partments, corridors, and elevators, during working hours, on account of the fire insurance regulations.

(3) *Intercommunication.* Employees are expected to remain at their work and not "visit." Communications regarding business matters are transmitted usually by messenger service, or over the telephone.

(4) *Personal mail.* Larger offices ask their employees to have the bulk of their personal mail sent home, but few restrictions are made where the volume of such mail is small. Most offices provide facilities so that employees may secure stamps and mail letters at the office.

(5) *Personal telephone calls.* In most offices, both incoming and outgoing personal calls are permitted during business hours, within reasonable limits, provided the privilege is not abused and the company's activities are not interfered with. Employees are charged only for toll calls as a rule.

(6) *Personal visitors.* Most offices prohibit personal visitors who come merely for social calls.

(7) *Subscriptions.* With the sanction of the department head, office employees sometimes are permitted to collect money for presents to employees who may be leav-

ing, or getting married, or for flowers in case of death of some office worker or a member of his immediate family.

(c) Facilities and conveniences for employees

(1) *Rest rooms.* Many offices provide rest rooms for girls. Rest periods, ranging from five to thirty minutes per day, are allowed in some offices.

(2) *Coat rooms.* Many offices have coat rooms equipped with steel lockers. In private offices coat racks usually are provided.

(3) *Dining rooms.* In larger cities, where restaurants are conveniently located, dining rooms usually are not provided. In smaller towns, the offices often have cafeterias. Some companies provide lunchrooms for girls who bring lunches from home, and furnish facilities for preparing coffee and tea.

(4) *Medical service.* In offices connected with manufacturing plants, doctors and nurses usually are available to attend to the needs of employees. Many of the larger offices in other businesses also provide such services. Facilities often are furnished for regular physical examinations and treatment of employees, health advice, even to families of employees,

health examinations, and dental service.

(5) *Insurance.* An appreciable percentage of the larger offices now provide life insurance for employees, usually under the group plan, often combined with sick benefits, and sometimes with dismemberment provisions. In manufacturing plants, both the office staff and the shop forces are included in the insurance plans. The company sometimes pays the entire premium, but usually the employees share in the payments. Accidents are covered under the workmen's compensation laws.

(6) *Savings associations.* Some offices have provided for savings-and-loan associations, thrift clubs, and similar savings plans for their employees. This practice is not universal, however, and the initiative is usually left to the employees. Smaller offices, especially in large centers, usually do not make such provisions.

(7) *Pensions.* Office employees who have long service records generally are pensioned. Plans now in force, in many cases, have been placed on an actuarial basis to insure adequate financing, with definite provisions for age of retirement and amounts of payments.

(8) *Stock-ownership plans.* Office workers connected with many concerns such as

manufacturing plants, publishing houses, sales organizations, etc., are permitted to buy company stock by depositing a certain percentage of their salaries with the company each month. Some companies contribute to this fund on a proportionate basis, or sell the stock at reduced cost.

(9) *Libraries.* Some companies maintain libraries containing books dealing specifically with work in their particular fields. Other offices have libraries of current fiction books usually loaned out at a small rate per day. Accessibility to city or town libraries, however, has limited the demand for company libraries, except for business purposes.

(10) *Educational facilities.* Most companies encourage their office workers to take up advanced studies, either in company classes, at local educational institutions in evening classes, in continuation schools if the workers are below the legal full-time working age, in classes composed of employees from a number of neighboring offices, or through correspondence courses. Often the company will pay part, or all, of the cost, usually upon successful completion of the courses.

(11) *Employees' clubs.* These clubs are encouraged in most offices, although they

are formed mainly in the larger concerns. Many employees prefer to join clubs outside of their regular business connections.

(12) *Recreation.* Offices in smaller communities often organize athletic teams or clubs —baseball, basketball, bowling, tennis, etc. In larger centers these activities are arranged usually outside of business connections. The local Y.M.C.A. often forms a headquarters for the groups from various companies. Similar conditions prevail with regard to company dances, picnics, and other activities.

(13) *Musical clubs.* Bands, orchestras, and glee clubs, principally in the smaller localities, sometimes are organized by office employees, with company aid. In many cases, especially in larger cities, workers prefer to connect with such groups on the outside.

(14) *Service awards.* Medals, certificates, buttons, and other tokens of merit are awarded by certain companies for acts, performance, or service of an unusual character. The practice, however, is still confined to a limited number of business organizations.

(15) *Sales to employees.* Items from stock, or special articles procured on request are

sold to employees in many offices. The practice is limited and is concentrated mainly in large companies, or in companies in smaller communities.

(16) *Miscellaneous services.* Parking space for automobiles is provided by some offices located in suburban sections or in industrial communities where the means of transportation are limited. Some offices will assist employees in planning and buying homes, arranging vacation trips, securing railroad tickets for traveling, getting theater tickets, and in other ways.

(d) Operating conditions

(1) *Rating plans.* Companies that have gone extensively into time and motion-study investigations have often applied such methods to office work and have adopted rating plans for office employees. The practice, however, is not yet widespread.

(2) *Reports on work.* Most offices require daily, weekly, or monthly reports on various jobs. Where large volumes of the same kind of work are handled, the practice is somewhat general, but as yet not a large percentage of offices utilize extensive systems of output reports.

(3) *Suggestion systems.* Few offices have suggestion systems that operate successfully. Those that are effective usually are combined with similar efforts in the shops of manufacturing plants.

(4) *Participation in the management.* Few offices have offered workers an opportunity to share in the management, aside from participation accorded department heads. Where there are employee councils, office workers have adequate representation on them.

(e) Safety and protective measures

(1) *Fire drills.* Directions for sending in fire alarms, and methods of exit in case of fire are listed in most office manuals, but little practical instruction is given and few offices hold fire drills, although the need is apparent. Fire-fighting equipment and fire alarms are installed in offices, by Underwriters' requirements.

(2) *Safety measures.* Accidents in offices are few. Hence few companies have accident prevention programs for office employees. Membership on safety committees is confined largely to shop and shop-office employees. Little accident prevention instruction is given to office employees.

16. *The administrator's problem.*—The introduction of employee-service plans often is fraught with far-reaching consequences. The responsibility is not one to be approached lightly. Attempts in this direction, if emanating from the administration, are so likely to meet flat failure that an administrator will do well to make sure that he is not committing his company to a welfare or service plan which has not been investigated thoroughly—in the light of the experience of others, together with his own conditions and facilities.

Where employees take the initiative, however, the picture is quite different. As has been stated, hearty encouragement by the company, rather than its active participation, should be the rule.

The services which seem likely to be most fruitful are employees' house organs for disseminating news about the employees themselves and about company policies; bulletin boards; savings-and-loan associations; insurance plans; personal advice and assistance; coöperative purchasing; proper eating facilities; club and reading rooms; recreational activities; health service; libraries and educational facilities; and group meetings.

The outstanding aim of employees' service is the provision of a healthful environment, attractive working conditions, and opportunities for self-development and social relationships.

REVIEW

Explain the attitude that a company should take in providing service facilities for its employees.

Outline the methods of developing an employees' house organ. How should it be conducted?

Name the important types of material for which a bulletin board should provide and explain the method of operating such a bulletin board.

Describe company savings-and-loan associations and outline the methods under which they operate.

Outline the provisions contained in the usual employee insurance contract and the methods of paying premiums.

Describe the factors involved in providing restaurant, club room, reading room and library facilities for employees.

What educational facilities may be provided and how should they be administered?

CHAPTER XVIII

SELECTION AND USE OF OFFICE EQUIPMENT

1. *Furniture, appliances, and accessories.*—The term "office equipment" is commonly understood to include furniture (such as desks, tables and chairs, and machines), or appliances (such as typewriters, calculators, and duplicators). In addition to these general types of equipment, many desk accessories are employed. They are not considered as "equipment" from an accountant's point of view. Nevertheless, they do contribute to the facilitation of office work. It is convenient, therefore, to divide "office equipment" into three classes:

(a) Furniture
(b) Machinery and appliances
(c) Accessories

2. *Importance of appearance.*—In selecting office equipment, it is advisable to give due consideration to appearance. The wide variety of styles, colors, and finishes of office equipment available, ranging from extreme severity to ornate elegance, and even magnificence, offer a breadth of choice that is limited only by the amount of money the company wishes to spend to make its offices attractive.

If a company has customers who enjoy and are

influenced by beauty of surroundings and by the apparent affluence and prosperity of a company with which they do business, the customers' attitude should receive due consideration. The administrator should choose the office furnishings accordingly. Competition for a customer's trade is altogether too keen to permit individual likes and dislikes in the company's management to cause any action that will make the business less attractive than any competing business, whether that attractiveness lies in the product, the service, or the home of the business—its offices.

A beautiful office has a direct effect upon those who work within it. Most workers respond to æsthetic surroundings. Some executives find it quite difficult to be happy in their work unless their business offices reflect an atmosphere of opulence. The administrator's problem is to determine the extent to which his business requires attractiveness in its furnishings and then to proceed along that line.

3. *The question of economy.*—Office equipment must also be considered from the standpoint of price and economy. Not every business can afford to spend money freely. With many concerns, price considerations must come first, at least during the "lean" years. An administrator, in such circumstances, is concerned not only with the immediate purchase cost but also with economical maintenance and operation.

The problem of replacement of obsolete equipment is always present. Depreciation takes place con-

stantly. A time arrives when the administrator must decide whether to keep a particular piece of equipment, trade it in for new equipment, or cast it aside.

4. *Office desks.*—Desks and chairs represent the most commonly-used furniture. The following three factors require consideration in selecting desks:

(a) The kind of work to be performed
(b) The floor space to be occupied
(c) The desirability of uniformity and standardization, for the sake of appearance and efficiency

The most important part of a desk, from a utilitarian point of view, is the top. The effective organization of desk work requires that the desk top be large enough to accommodate the material to be worked upon, and no larger. Provision must be made for incoming and outgoing papers. Two trays labeled "In" and "Out," respectively, will answer this purpose in most cases.

There are some kinds of work that may be most effectively performed with specially-designed desks. The resulting increase in efficiency often will warrant the increased cost. The administrator should be certain, however, that a call for a special design is not due simply to a whim on the part of some individual. He should make sure that it really would represent a desirable improvement in the office facilities.

All requests for special equipment should receive serious attention. An apparently simple suggestion often contains the germ of a valuable idea. However, any modification of desk-top design, either in

the way of shape or superimposed shelves, should accomplish one of the following purposes:

(a) Keep the desk surface absolutely clear of everything except the work being done at the moment
(b) Keep within easy reach any particular desk tools that may be needed frequently
(c) Keep immediately accessible any material needed for frequent reference
(d) Provide space, other than the desk top, for receptacles for incoming and outgoing papers, or materials

5. *Efficient use of desk drawers.*—A desk should not be used as a storage cabinet, except perhaps in very small offices. Desk drawers should be considered as special equipment to supplement the main purpose of the desk as a workbench. The purposes of desk drawers should be solely those stated below, which are somewhat similar to the purposes listed in connection with special equipment:

(a) To keep within easy reach frequently-used desk tools not needed on top of the desk
(b) To keep readily accessible any reference material for which other provision has not been made
(c) To keep within easy reach the daily supply of stationery items used at the desk
(d) To provide an overnight resting place for unfinished work

Unless carefully watched, the last-named purpose is likely to become more important than the other three, and the drawers may be turned into convenient hiding places for all sorts of things.

Kinds of desk work that are similar are likely to require similar conveniences and tools. A careful study will determine exactly what items are needed. A standard arrangement for the interior and exterior of the desks is desirable. The labor costs of the office represent time spent by the employees; and the office manager should endeavor to find as many ways as possible of saving time spent on fruitless effort. That time should be turned into more profitable channels.

6. *Standard desk equipment.*—The most efficient desk for most types of office work is not much more than a table, with one center drawer divided into standard compartments for holding standard items. One manager equips each desk as follows:

2 desk trays—"cap size"
1 desk calendar pad
1 fifteen-inch ruler
1 combination inkwell for red and black ink
2 pens and penholders
4 pencils—varying from hard to soft
3 colored pencils—blue, red, green
1 pencil eraser
6 small blotters—not calendered
1 pair of eight-inch shears
3 oblong glass trays—one each for clips, pins, and rubber bands
1 band dater
1 stamp pad—black ink
1 pad of stationery requisitions
1 sheaf of scratch paper

If special kinds of work require additional items,

such as paste, thumb tacks, rubber stamps, hand punches, and so forth, they are supplied, and a definite place in the desk is indicated for each of them.

While it is desirable to have the desk top of the right size for the work to be done upon it, some consideration must be given to uniformity for the sake of appearance and economy. An office filled with desks of different sizes does not look attractive. Not only is the appearance displeasing, but the floor space is unevenly covered, making it difficult to provide aisle space advantageously. The installation of standard-type, uniform-size desks makes possible the rearrangement of an office and facilitates the transfer of desks to other departments, if such transfer proves necessary. For most clerical purposes a desk 30 by 48 inches will be found sufficiently large.

7. *Advantages in using tables.*—The use of standard-size tables in place of desks, wherever possible, will be found advantageous from four points of view:

(a) Economy of purchase
(b) Less obstruction to light and air
(c) Sanitation
(d) Tendency to help produce more efficient work

Tables must be rigid and fairly heavy, to avoid the shifting which always is fatiguing to the worker. Typewriter tables in particular are apt to wobble unless made and braced strongly. All tables or desks on which machines are used should be sufficiently rigid to prevent vibration.

8. *Design of office chairs.*—Office chairs are used for three purposes:

(a) For sitting at a desk or table
(b) For sitting beside a desk or table
(c) For turning around while seated, without arising

The first and second purposes are fulfilled by a common desk chair, with or without arms, the third by a swivel arrangement on the desk chair, which permits swinging around easily. Most swivel chairs also have a tilting device. Many executives, however, prefer a regular non-swivel chair that sets firmly on the floor. This type of chair does not move out of place like the typical swivel chair with rolling castors, and it provides a substantial support to the back of the user.

The elimination of fatigue by providing rigid chairs is an important point often overlooked. Unless a desk worker has frequent occasions to turn around, or to get up from his desk, a non-swivel, castorless chair may be preferable. Some office managers find that better results are obtained when chairs without arms are used.

Much attention has been given to chair design, with the object of providing a really-comfortable working chair. While considerable improvement has been made in this direction, the fact that designers and chair manufacturers are still bringing out new "efficiency" designs indicates that the ultimate in work-chair perfection has not been reached.

Attempts to improve work chairs have been limited

largely to the seat and the back. The factor of height from the floor has long been recognized in schools, but less consideration has been given to it in offices, except where adjustable swivel chairs are used. Even where the adjustable swivel type is used, the employee generally is obliged to request that the chair be adjusted, and many employees hesitate to make such a request. The correct distance from the floor to the seat has been determined by scientific measurement, and a scientifically-managed office should incorporate in its standard-practice rules a provision for this adjustment. The "ideal" office chair should be comfortable to sit upon, it should be adjustable to the right height from the floor, and it should furnish a substantial support to the back of the occupant.

9. *Selection of filing cabinets.*—Filing cabinets for correspondence purposes usually are selected on the basis of the filing space that they provide. Steel cabinets have an advantage over wood in this respect. They occupy less floor area, and, for the amount of floor area occupied, the filing space is greater. The object in buying filing cabinets invariably should be to purchase *space*. Filing space is dependent upon the inside horizontal distance from the front of the file drawer to the back of the drawer, allowing for the compressor slide. Since this distance may vary with different types of cabinets, it should be investigated before the equipment is purchased.

Another important point with respect to filing

cabinets is ease of operation. The less effort spent by file clerks in pulling out file drawers, the more energy they will have for filing papers correctly.

Still another important point with respect to filing cabinets, and one that often is slighted, is the provision of enough filing cabinets to take care of the office requirements. Too frequently, file drawers are stuffed and jammed. A drawer that is more than three quarters full is too full. It cannot be effectively operated. The file clerk who is handicapped by crowded files probably is able to accomplish not more than half of what he could accomplish with adequate cabinets. Many an office is paying the salary of an extra file clerk who could be dispensed with if a few extra cabinets were bought.

10. *Maintenance of office furniture.*—With all office furniture, the problem of maintenance, repair, and cleanliness must be given constant attention. Maintenance and repair have been covered in Chapter VI, pertaining to general service. To keep office furniture clean and presentable, the original finish should be preserved by regular and frequent application of a polish that will clean the surface and impart to it a dull, greaseless luster.

11. *Importance of office machinery.*—The rapid improvement in office machinery and appliances has been accelerated in recent years by the merger of appliance manufacturers and, in some cases, by "cross-licensing." As a result of these developments, office machinery is now available for performing a

seemingly unlimited number of office operations. The application of electric drive has speeded up many machines and made possible an unusually rapid rate of production. Modern machines save not only brain work but time. This saving of time is tremendous. It is necessitated, of course, by the *tempo* of modern business, which demands results of the office that only a few years ago would have been branded as unreasonable and impossible.

In general, office machines and appliances serve the following purposes:

(a) Writing or printing
(b) Duplicating or copying
(c) Recording
(d) Communicating
(e) Computing or calculating
(f) Opening, cutting, or slitting
(g) Classifying or sorting
(h) Distributing
(i) Folding
(j) Inclosing
(k) Wrapping and tying
(l) Stapling, fastening, and sealing
(m) Stamping
(n) Sharpening
(o) Canceling

Under each of these general headings may be listed the machines representative of those used for the purpose:

(a) Writing or printing
    (1) Typewriters
    (2) Billing machines

(3) Addressing machines
(4) Check writers
(5) Signature machines
(6) Multigraphs
(7) Numbering machines
(8) Labeling machines

(b) Duplicating or copying
(1) Typewriter with carbons
(2) Hektographs
(3) Stencil duplicators
(4) Type-and-ribbon duplicators
(5) Automatic typewriters
(6) Photostats

(c) Recording
(1) Typewriters
(2) Billing machines
(3) Bookkeeping machines
(4) Card-punching machines
(5) Cash, and office registers
(6) Dictating machines
(7) Time recorders
(8) Telautographs
(9) Check-endorsing machines
(10) Perforating machines
(11) Production recorders
(12) Registers

(d) Communicating
(1) Telephones—manual or automatic
(2) Telegraph
(3) Telephone typewriters
(4) Telautographs
(5) Dictographs

(e) Computing or calculating
(1) Adding, or adding and listing
(2) Calculators

(3) Slide rules
(4) Bookkeeping and billing machines
(5) Computing scales

(f) Opening, cutting, or slitting
(1) Envelope openers
(2) Paper cutters

(g) Classifying or sorting
(1) Sorting machines
(2) Tabulating machines
(3) Filing sorters

(h) Distributing
(1) Mechanical carriers
(2) Conveyor systems
(3) Pneumatic tubes

(i) Folding
(1) Folding machines

(j) Inclosing
(1) Gathering-and-inclosing machines

(k) Wrapping and tying
(1) Wrapping machines
(2) Tying machines

(l) Stapling, fastening, and sealing
(1) Stapling machines
(2) Tape-sealing machines
(3) Wire-sealing machines
(4) Envelope sealers
(5) Stamping-and-sealing machines
(6) Parcel sealers

(m) Stamping
(1) Stamp affixers
(2) Stamping-and-sealing machines

(n) Sharpening
(1) Pencil sharpeners

(o) Canceling
  (1) Canceling machines
  (2) Perforators
  (3) Shredding machines

The National Association of Office Appliance Manufacturers has prepared an 836-page manual that describes these devices and many others. Reference should be made to that manual for more complete details than are possible within the limits of this Text.

12. *Selection of office machinery.*—Often there are several makes of machine available for each purpose. Naturally, this necessitates making an intelligent choice of the best one. Such a choice is no longer easy, because of the uniform mechanical excellence of modern office machinery—and the increased sales ability of the manufacturer's sales force. Undoubtedly, there are numerous instances where superior salesmanship has been responsible for the installation of equipment decidedly less suited to the purpose than a competitive product that may not have been so ably presented. In the face of this situation, it is more than ever necessary to move slowly in the making of a selection. Usually the most important factor is the nature of the work for which a given machine is needed. Then the decision rests upon selecting, from all the machines available for doing that work, the best one for the office concerned. A fair trial will help. Office-appliance manufacturers generally are ready to go more than halfway in mak-

ing such tests, even to the point of furnishing competent operators for purposes of demonstration.

13. *Factors to be considered.*—Among the factors that enter into the consideration of the purchase and installation of any office machine are these:

(a) Will it do the work that is to be done?
(b) Will it do that work in the way that the management wants it done?
(c) Is there enough work to keep the machine busy?
(d) Can an operator be procured readily?
(e) What will the machine cost to operate?
(f) What about maintenance and repairs?

Probably many devices will be found that will do the work. But, in connection with some of them, so drastic a rearrangement of the preceding and succeeding steps will be necessary that the manager may wonder whether the machine is being installed to *do the work* or the office is being adjusted to *meet the needs of the machine.* The need of a certain amount of readjustment, however, should not obscure any real advantages to be obtained through the use of a time-and-labor-saving machine of proved excellence.

The importance of the question of volume of work depends to a great extent upon the primary purpose of installing the machine. If that purpose is solely to save time, then the *volume of work to be done* is not so important, relatively, as the *value of the time saved.* If the need of getting the results quickly is of paramount importance, then the decision will rest

upon whether or not the quicker results are worth what the machine costs to buy and operate. If they are worth that much, the answer is obvious, even though the machine may stand idle a part of the day.

If the primary purpose is not so much a saving of time as a saving of labor, the volume of work to be done is of primary importance. If there is no saving of labor, or no increase of efficiency over the existing method, probably the machine should not be purchased. If the question of accuracy is vital, that factor should be given its proper weight in settling the question of purchase.

Sometimes, in connection with operation, the advantages of a machine may be outweighed by the difficulty of getting a suitable operator, particularly if the machine is to be running only part of the time. On the other hand, except in isolated communities, the appliance manufacturers have realized the necessity of seeing that trained operators are available, and have made provision accordingly.

The salesman's estimate of the economy to be obtained by utilizing a certain machine may be given honestly enough, but it should be checked up with care. He naturally is anxious to sell the machine. His opinion, therefore, may be somewhat biased. As a matter of fact, even the operating-cost figures of other users may not be wholly reliable, since no one who has made a poor bargain is anxious to admit it. The whole question is worthy of serious study.

The problem of maintenance and repairs deserves

special consideration. The more delicately adjusted a machine, the more frequent are likely to be repair calls. How well equipped is the manufacturer's local agency to give prompt service in this respect? Will breakdowns prove unnecessarily expensive because of delays in getting replacement parts? Is so much dependence going to be placed on this machine that a breakdown will be costly or crippling? If so, perhaps an extra machine, just for emergencies, will be necessary.

14. *Results to be expected.*—In the absence of facts to guide the prospective purchaser, the decision may rest partly upon pressing need, or upon trial, or guesswork, or the good faith of the manufacturer of the machine. After all, the three main advantages to be looked for are the following:

(a) Saving in time (a matter of speed) bringing about
    (1) Quicker results, or
    (2) Greater output in the same, or less, time
(b) Saving in labor, resulting in
    (1) Lower payroll for the same output
    (2) Greater output for the same payroll
(c) Improved quality of product
    (1) In appearance
    (2) In accuracy

Unless these advantages, or some of them at least, can be realized from the installation of a contemplated machine, probably the machine should not be installed.

15. *Replacement of equipment.*—The replacement of obsolete and worn-out machinery is a problem that

faces every administrator, sooner or later. In determining whether or not obsolescence has progressed to the point of making replacement necessary or advisable, the administrator is faced with the consideration of the same factors that he examined before the original purchase of the machine. Since the same factors are now present, approximately the same procedure and line of reasoning should be followed. There is, however, one marked difference. At the time of the original purchase, the administrator did not have the advantage of any experience with the machine. Therefore, in the case of a re-study, he is in a better position to act intelligently than he was originally. He knows from his own experience how much benefit, if any, the used machine has represented. He can judge the future in the light of the past.

The best time to replace any worn machinery that is not necessarily obsolete is governed by two factors. First, any machine that is to be traded in should be exchanged before the trade-in allowance has fallen too low, unless the machine may be retained profitably for use as an emergency substitute. In the case of typewriters, the most satisfactory adjustment may be made just before the end of the third year. After the fifth year, the trade-in allowance drops precipitately. Since the periods governing trade-in allowances are determined by the serial numbers on the machines, and not by the date of purchase, the office manager will do well to deter-

mine the exact date of the end of the period by consulting the manufacturer's representative.

16. *Effect on output.*—The greatest loss from worn-out machinery is not so much the lessened trade-in value as the lessened output that may be obtained from any equipment that is not in perfect operating condition. Here, again, the management must realize that serious losses in efficiency often are hidden in the payroll, through the inability of well-paid and thoroughly-competent employees to turn out perfect work in normal quantities because of inadequate equipment. Any equipment that is in poor operating condition is inadequate, and its use will not be tolerated by good management. Methods for a regular check-up of this factor have been mentioned in the chapter on general service.

17. *Office accessories.*—There are many appurtenances and accessories, other than furniture or machinery, that find regular use in the office. Most of these items are used at desks and, therefore, are called desk accessories. Their purpose usually is to facilitate the handling of desk work. They ordinarily are justifiable only to the extent that they facilitate the handling of such work. The danger in their use, if it can be called such, lies in the mere novelty appeal of many of the accessories that are brought on the market from time to time. Many of them are particularly ingenious and, on first inspection, arouse enthusiasm to the "purchasing pitch." Like all other items of equipment, however, they should be sub-

jected to a cost analysis. Every accessory takes up a certain amount of room and involves operating and maintenance expense. To justify its purchase, it should be required to pay its own way.

Mucilage spreaders have replaced the old-fashioned paste pot and mucilage jar. One type has a rubber cap on the jar. In order to use it, one merely squeezes the cap and then operates it as a spreader. Another similar device does not require squeezing, the mucilage oozing out through a linen cap. A third device combines an effective spreader with an ash tray. For non-smokers the tray serves as a holder for paper clips or rubber bands.

18. *Telephone conveniences.*—Telephone indexes are made in at least two convenient forms. One looks like a miniature roller shade. It is attached to the mouthpiece of the telephone. In finding a number, the "shade" is pulled. When the number is ascertained, the shade is released and slides back into position. The second type consists of a long strip of paper coiled on two spools. The paper is inclosed in a small container in such a way that four names and numbers are visible at one time through the opening. Twirling a knob brings into view successively, in less than two seconds, the entire list of 720 names and numbers.

Telephone brackets eliminate annoyances with the ordinary telephone instrument, which generally is either in the way or else inconvenient to reach. Some provision should be made to keep the instrument off

the working surface of the desk except when in use. Several devices will accomplish this purpose. One is an auxiliary table or a shelf placed on the side of the desk. A telephone bracket is obtainable that permits using the instrument from any position but that keeps it out of the way until wanted.

Telephone silencers are sometimes desirable accessories. A muffling device is now on the market that enables the speaker to talk without being overheard. On long-distance calls, where the voice may be raised higher than usual, such a device prevents interrupting others in the office.

19. *Other desk conveniences.*—Wooden desk trays, "cap size," probably have been more popular than any other kind. Steel letter racks are likewise attractive, durable, and efficient.

Desk organizers, so called, find their greatest objection in the tendency to bury papers in the "organizer" and thus neglect to take care of them. That, however, is the fault of the user and not of the equipment. One of the most effective desk organizers contains several side-opening pockets. It lies flat on the desk, opening to the left like a book. If a desk organizer is used, it should be kept where it will not take up desirable working space, but yet be instantly accessible. There are many types and sizes, some made to fit desk drawers.

Sponge cups are of service where frequent use of a wet sponge is necessary. It is desirable to use a glass cup with two compartments. The sponge is

held in the inner cup. When it is squeezed, the water runs into the outer cup and then back into the well.

Clip and pin trays are useful accessories, although some office workers prefer pincushions for pins and round sponge cups for clips. The use of an oblong glass tray for pins will keep the pins lying all the same way, thus obviating pricked fingers, with consequent liability to blood poisoning. Clips can be kept in similar trays. It should be unnecessary to point out that pins and clips never should be kept in the same receptacle.

Desk-drawer compartments are most effective time-savers. Every desk should be equipped with them, or with some acceptable substitute. Usually the house carpenter is able to place thin strips of wood in the drawers in such a manner as to meet the needs of the user.

A glass desk top appears to instill in its possessor a feeling of prestige. Aside from this fact, the only advantage of such a top is the opportunity to make visible any material that is referred to frequently. It sometimes is a question, however, if this is the best place for such exhibits. Users of glass desk tops often find that their sleeves wear out very quickly. Perhaps the most serious disadvantage of the glass top is that it reflects light into the user's eyes, thus causing unnecessary eyestrain. The use of such tops should be discouraged, under ordinary circumstances. Linoleum, as a desk-top surface, is used in many offices.

20. *Miscellaneous conveniences.*—"In and out" registers are convenient devices for indicating whether or not certain people are in the office. They should show the time when each absent member is expected to return. An "in and out" register, with sliding markers, answers this purpose very nicely.

Copyholders are useful where the volume of typewriting work is large. The most effective device yet available for holding the stenographer's notebook is one that holds the copy at eye level in front of the operator's eyes. A tap on a lever near the typewriter keyboard raises the copy a line at a time.

Non-shine felt pads on chair seats help to prevent trousers and skirts from getting shiny. Chair cushions are comfortable, but frequently induce perspiration and consequent discomfort. Most offices discourage their use.

REVIEW

Name the three classes of office equipment.

Contrast the factors of appearance and of economy in the selection of office equipment.

List the factors that must be taken into account in selecting office desks.

State the functions that the interior of a desk should fulfill.

Under what conditions may the use of tables in place of desks be advantageous?

Outline the factors that should be considered in selecting office chairs.

List the important requirements that filing cabinets should fulfill.

List ten different types of office machines and appliances and give an example of each.

What factors should be considered in installing office machines?

Discuss the question of replacement of equipment.

Name and describe the use of five types of office accessories.

CHAPTER XIX

OFFICE COSTS AND BUDGETS

1. *Office costs.*—Certain office expenses vary with fluctuations in the volume of work, while other expenses are relatively fixed or constant. Salaries of permanent members of the organization are not affected by changes in volume of business. Likewise, overhead expenses, such as light, heat, rent, and so forth, run on irrespective of the amount of work passing through the office. Because the items of overhead are not usually affected by the volume of business, any increases in such expenses should be looked upon with suspicion and checked up without delay. In fact the office manager should endeavor to keep all items of overhead as near as possible to what might be called an irreducible minimum.

2. *Variable items of cost.*—The items that vary directly with volume fluctuations present problems that require the best management ability for solution. One of the largest items in this group is that part of the clerical payroll which comprises the salaries of employees whose number must be increased or decreased according to variations in the volume of office work. Because of this fact, the importance of knowing the capacity of the individual worker is obvious.

For the same reason, we are reminded again of the desirability of establishing standards of performance and standards of output for each job. With these factors determined as accurately as possible by careful job study, the manager is in a position to develop a chart showing the number of clerks required for any volume of a given kind of work. Within reasonable limits, the number of clerical workers should "move up and down" on the chart coördinately with the figures showing volume of work. If a chart of this kind is maintained, showing actual conditions, any departures from the established figures will be evident at once. When changes in the volume of work are forecast, the number of workers can be increased or reduced in time to meet the anticipated changes when they occur.

3. *Obtaining the unit cost.*—Unit cost is sometimes used to show the trend and to indicate whether it is advisable to increase or reduce the force. The unit cost for any kind of work is obtained by dividing the payroll cost of a certain period by the number of units handled during the same period. For example, if the payroll period is one week of 5½ eight-hour days, and a clerk receiving $21 handles one step in the order routine at the rate of 30 orders an hour, that clerk is handling 1,320 orders a week at a unit cost of 1.59 cents $\left(\frac{21.00}{1{,}320} = 1.598\right)$. That is, the worker is paid at the rate of 1.59 cents for the work he does on each order, if he devotes his entire time to that work.

If 30 orders per hour is the standard output for that operation, and the workers are paid on the basis of output, then each employee on this job will receive 1.59 cents for each order he handles. The unit cost for the operation will remain the same as long as the same rate is paid, and it will increase or decrease in direct ratio to any changes in rate.

Suppose, however, that a weekly salary of $21 were paid to clerks performing this operation, regardless of output. Then the unit cost would vary according to the output of each employee. The unit cost for all workers turning out 1,320 orders a week would be 1.59 cents; for those turning out only 1,000 orders a week the unit cost would be 2.1 cents; while for those turning out 1,500 orders a week the unit cost would be 1.4 cents. Obviously, the low-unit-cost workers would be underpaid and the high-unit-cost workers overpaid.

4. *Watching payroll costs.*—The best method of controlling payroll costs is to figure and watch the unit costs. When any unit cost tends to get "out of line," as shown by the appropriate graph, an investigation should be made to reveal the cause and to point out the proper remedy. As long as unit costs remain at the same level, that particular operation will not need special attention, provided the level is a reasonable one. Any decrease in the volume of work will raise the unit cost, unless a corresponding reduction is made in the clerical force. The office manager should be enabled, as far as possible, to foresee coming

changes sufficiently in advance to make adequate preparation for them. A competent manager will maintain a correct balance between costs and service. To do so he must know what his payroll cost should be for a given volume of work.

The simplest way to keep a constant check on cost figures is to plot them on a chart as soon as they are known, and to study each graph in detail to determine the significance of any changes that take place.

The graphic charts shown in Fig. 19 illustrate the ease with which comparisons are made. The curves in the top chart represent the volume of work and the payroll of a certain general office. In the middle chart, the curve appearing above the straight line indicates the "unit cost" of the general office. It shows a decreasing tendency. From this curve we see that while the general office payroll has been increasing, the volume of work has increased so much more rapidly, in the same period, that the net result has been a decreasing unit cost.

The unit cost and work volumes of one of the departments of the office are shown in the middle and lower charts. The lower curve in the middle chart indicates that the unit cost of this particular department is lower than the unit cost for the general office. The lower chart shows the volume of work for the same single department. The straight line in this chart represents the "standard volume of work" that is expected from a given payroll. The two straight lines (lower and middle charts) indicate that

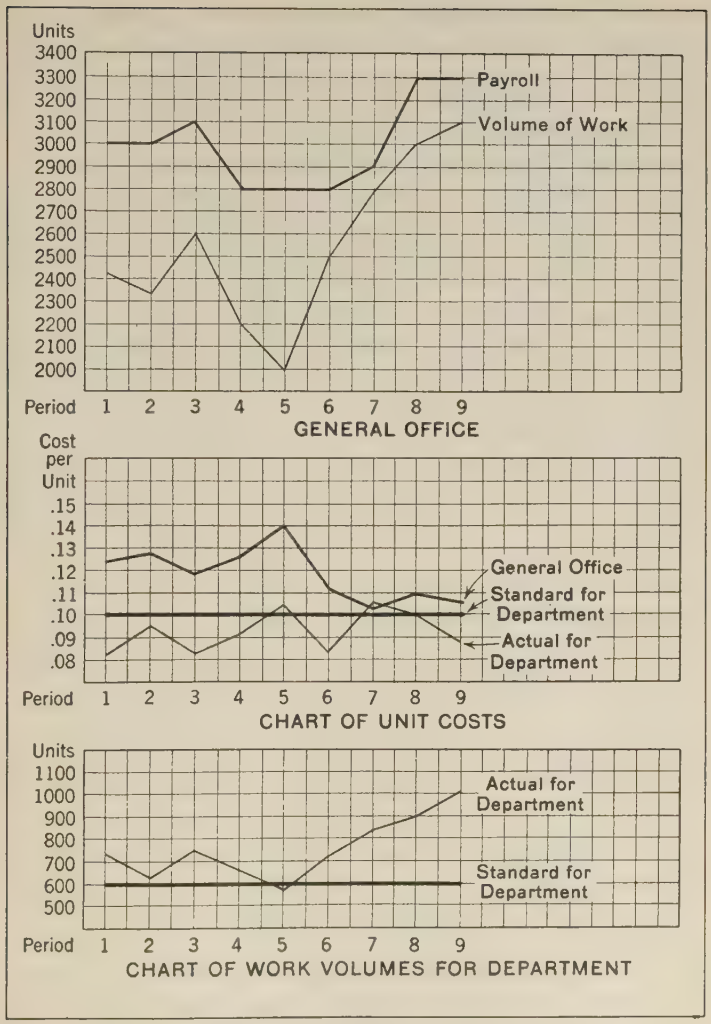


FIGURE 19—TYPICAL STATISTICAL CHART

for 600 units of work during a certain period, the standard unit cost should be ten cents. A comparison of the curves in the same two charts shows that, although the volume of work has been increasing, the unit cost has been kept lower than the "standard."

5. *Material costs.*—The cost of materials is another large item among those that vary with fluctuations in work-volume. (Materials include stationery, desk supplies, typewriter ribbons, filing folders, and similar items.) For example, the quantities of office forms used will vary directly with the volume of each type of work passing through the routine operations.

It is possible to estimate with reasonable accuracy the quantities of office materials necessary to handle a normal volume of work, and from this basic factor to forecast the quantities for fluctuating volumes. This procedure will bring about a figure representing the anticipated cost for any period. The comparison of estimated with actual costs is never likely to check with absolute accuracy, but it will serve as a helpful guide.

6. *Controlling disbursements of stationery.*—A tendency toward carelessness in the disbursement of stationery may arise because office supplies sometimes are purchased for a considerable period in advance. Large stocks of supplies on hand may encourage waste. These stores of supplies represent money. They should be handled as carefully as money itself. Adequate control can be maintained by subjecting the storing of stationery and supplies to a central author-

ity, and disbursing items only on signed requisitions that indicate the department and account to be charged. By comparing the withdrawals of any department with the estimated requirements of that department for the same period, any outstanding discrepancies can be discovered and the reasons for the overrun ascertained.

7. *The office budget.*—A budget of office costs for a stated period is merely an estimate of what it will cost to handle a stated volume of office work for that period. It will show the following items:

Item	Expense for Given Volume	Expense for Larger Volume	Expense for Lesser Volume
Payroll (regular)	Fixed	Same	Same
Office overhead	Fixed	Same	Same
General overhead	Fixed	Same	Same
Payroll (variable)	Fixed	Increased	Decreased
Materials	Fixed	Increased	Decreased

8. *Office budget* vs. *general budget.*—The office budget is similar to the general budget except in one very important particular. The general budget is based upon an expected amount of business, which is expressed in dollars and cents. Any variations between *expected* and *actual* amount of business will be reflected in the general budget in direct ratio. Consequently, a decrease in the amount of business may call for a decrease in certain items in the general budget.

But the *volume of office work* is not necessarily de-

pendent upon the *amount of business transacted.* This may be illustrated readily by comparing the size of the office staff which is necessary to handle a small volume of large orders, with the size necessary to handle a large volume of small orders, the amount of business being the same in each case. Thus, assume the following figures:

Volume of Business	Average Size of Order	Number of Orders
$1,000,000	$2,500	400
1,000,000	50	20,000

Obviously, a larger office staff would be needed to handle 20,000 orders than to handle only 400 orders.

9. *The administrator's problem.*—The purpose of the budget is twofold: To furnish an estimate of coming requirements, and to provide a standard against which actual performance may be measured.

The efficient financial operation of an office, or office department, is not measured merely by the amount of money spent or saved compared with the budget allowances. An equally important factor is the way in which the budgeted amounts were spent. In other words, the administrator should know what volume of work was handled, what forces were employed to handle it, and how much the handling actually cost.

The only reliable indicator of office efficiency, as far as expense is concerned, is the unit cost. In studying unit costs, the administrator should not

overlook the fact that the relative necessity or importance of certain units may change. He continually should aim to discover and eliminate unnecessary or useless work.

REVIEW

Discuss the variable items of office costs.

Outline the value of the graphical method in analyzing payroll costs.

How may the cost of office stationery and supplies be controlled?

Describe the relationship of the office budget to the general budget.

Discuss the administrative problem in connection with office costs.

CHAPTER XX

OFFICE FORMS

1. *Office forms that have proved their usefulness.* —In the Text we have endeavored to limit our discussion as closely as possible to the fundamental principles of scientific office management and to the outstanding problems of the administrator. Very little has been said about "systems" of any nature because each administrator must decide for himself what will fit best into his particular organization. In the present chapter, however, a few forms are shown that have been found useful in facilitating and controlling office activities. These illustrations may suggest a manner of solving certain problems of procedure and technique.

When a manager learns about a successful plan which someone else is using, he may be tempted to adopt that plan completely for his own office. But no plan or office form should be adopted in its entirety unless it is studied thoughtfully as to its adaptability to the existing conditions in the office in which it may be used. Mere imitation is not consistent with good management. The illustrations found in this chapter are intended only to show how certain things are done in certain offices. The wholesale

adoption of these forms and methods is not recommended by any means.

2. *Checking the porter's work.*—The form shown in Fig. 20 is one which the author has found to be extremely useful in his own organization. Some time

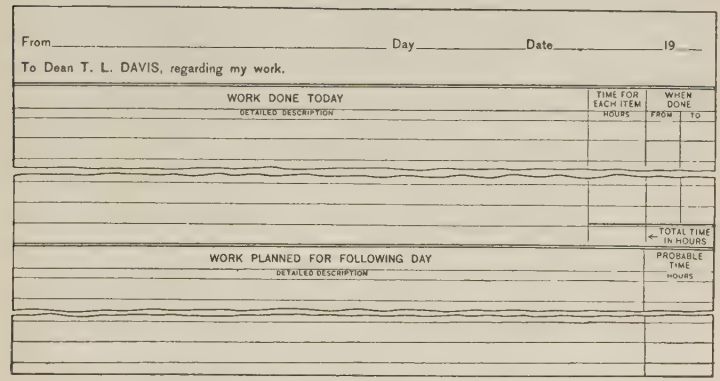


FIGURE 20—WORK REPORT FORM

ago it was decided to employ a man who would devote the greater part of his time to the making of minor repairs. Occasionally, he might be asked to assist the porter. To make sure that his addition to the staff represented a profitable venture, it was necessary to check up his work from day to day and see that he was kept busy. When this new man came into the organization, it was decided also to supervise the details of porter work more carefully than in the past. Consequently, the author delegated to one of his own assistants the duty of supervision. Up to this time no systematic method of supervision had been followed.

When the change was made, the porter and repairman were supplied with blocks of printed forms like that shown in Fig. 20. They were instructed to fill out and file the reports daily. Reference to the form will show that the reports indicate precisely what has been accomplished, as well as the time devoted to each item. The lower half of the form enables the worker to report the activities in which he expects to be engaged during the following day. He is supposed to list all of the work that he has planned for that day. Obviously, if he has very little definite work in mind, it is the duty of the supervisor to find something that will keep him busy.

It is felt that "keeping a line" on these activities has helped in more ways than one. The general advantages are obvious. The record of accomplishment, as shown by his own written reports, will demonstrate conclusively whether or not it is profitable to keep the repair man on the staff.

3. *Putting instructions in writing.*—The giving of oral instructions is constantly necessary. Unfortunately, however, oral instructions are not always clear. The lack of clarity may be due to the haste with which they are given, or to their complexity. Many offices have found it desirable to request that instructions be put in writing and that a copy of such instructions be furnished to all who are affected. The element of clarity which this plan promotes is most desirable. It is possible, of course, to refer to the written instructions again and again, whenever one finds it neces-

sary to refresh his memory on specific points. The heading which one company uses for its memorandum blanks is represented in Fig. 21.

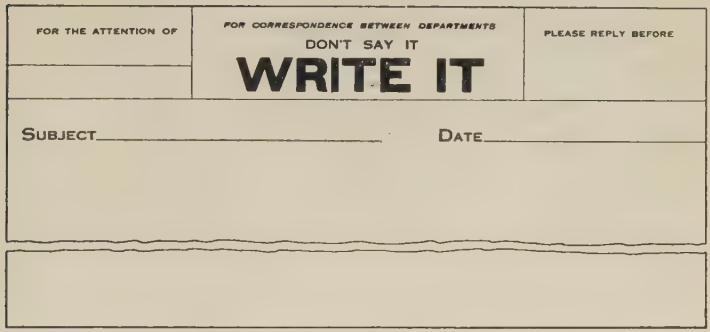


FIGURE 21—FORM FOR CORRESPONDENCE BETWEEN DEPARTMENTS

4. *Daily report of correspondence.*—A form designed to control the activities of correspondents is illustrated in Fig. 22. The form is used to show (a) the distribution of incoming mail among the various correspondents of the central correspondence department, and (b) the disposition of that mail by the individual correspondents.

The number of letters on hand when the office is opened, in the morning, is recorded first. Then a record is made of the number of letters distributed to the correspondents on each of the three regular deliveries (in this case, at 9 a.m., 11 a.m., 3 p.m.). The form provides for the separate listing of any special-delivery or air-mail letters and telegrams. It also shows the number of letters which the individual correspondents send to and receive from other depart-

DAILY MAIL REPORT

Date

	CORRESPONDENTS																	
	LAUBNER																	Totals
On hand 9.00 A.M.	5																	
INCOMING MAIL: 9:00 A.M.	20																	
11:00 A.M.	10																	
3:00 P.M.	8																	
Specials	2																	
RETURNED FROM Credit Dept.	6																	
Shipping Dept.	4																	
Received To-day	50																	
Totals	55																	
ANSWERED	23																	
FILED	10																	
SENT TO: Credit Dept.	5																	
Shipping Dept.	4																	
On hand 5:00 P.M.	13																	
TOTALS	55																	

FIGURE 22—DAILY MAIL REPORT

ments, as well as the number of letters answered and the number which have been filed without the necessity of a reply.

For example, let us assume that a correspondent, Laubner, had on hand, at 9 a.m., 5 letters which needed attention. During the day he received 50 letters distributed as follows:

Incoming mail
- 9 a. m. ..... 20 letters
- 11 a. m. ..... 10 letters
- 3 p. m. ..... 8 letters

Specials ..... 2 letters
From credit department ..... 6 letters
From shipping department ..... 4 letters

This means that a total of 55 communications

should receive the attention of the correspondent on this particular day.

Now, let us say that he actually answered 23; filed 10 which needed no reply; sent 5 to the credit department for needed information; and forwarded 4 to the shipping department. The report shows, therefore, a total of 13 letters on hand at the end of the day. The point that interests the office manager or the administrator is this: Why were 13 letters held up at this desk? Was the correspondent unable to answer some of them because of a lack of necessary information, or did he simply devote so much time to those that he did handle that he did not have an opportunity to take care of the 13 which he held at the end of the day? When such information is available in regard to all of the correspondents of the department, it provides an excellent means of evaluating the efficiency of the individual correspondent.

5. *Disposition of carbon copies.*—Carbon copies of letters may be disposed of in several ways. They may be:

(a) Sent to the files
(b) Destroyed
(c) Referred to others
(d) Marked for follow-up

To standardize the disposition of carbon copies and make it easier for the correspondent to indicate precisely where the carbon should go, one large office uses sheets for carbon copies bearing an imprint like that shown in Fig. 23. A thin "goldenrod" paper is

used. Across the top of the sheets are printed the most common directions given by correspondents to the file clerks. To dispose of the carbon copy correctly, the correspondent simply checks the proper

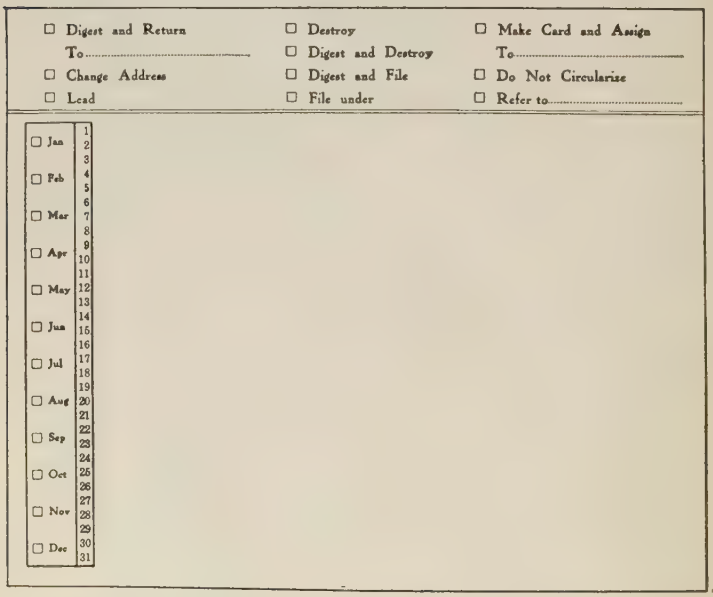


FIGURE 23—INSTRUCTION FORM FOR FILING CORRESPONDENCE

square printed at the top and places the sheet in the "outgoing" tray. If the copy is to be referred to again at a stated time, the calendar printed in the left margin is used to indicate the date when it should be returned to the correspondent. Two check marks, for the month and for the day, tell the story.

Sometimes it is convenient for the correspondent to

indicate the disposition of carbons at the time when the letter is dictated. Under such circumstances, the transcriber checks the proper spaces in the printed section of the carbon copy sheet. Whenever this practice is followed, the correspondent should be sure to verify the checking of the transcriber.

6. *"Conferences" through interdepartmental mail.* —In every business, occasions arise which make it desirable for a certain communication to receive the attention of two or more officials. In the majority of cases, it is not worth while to call a special conference of those concerned. On the other hand, it usually is not desirable to defer consideration until a conference happens to be held. One concern has found a happy solution of the problem in the use of a printed slip like that shown in Fig. 24. The sender attaches one of these forwarding slips to the message which is to receive the consideration of certain officials. On the slip, it will be seen that the initials of the various officers and department heads are printed in the second column. The standard practice in this particular firm is to cross out the initials of those who *do not need* to give the matter their attention. Most managers probably would prefer to indicate that the document to which the slip is attached should be sent only to those whose initials *are checked* rather than only to those whose initials *are not crossed out.*

As each man receives the slip and reads the message, he notes his comments in the space reserved for that purpose. He then passes it on to the next man

indicated in the list. When the last man has examined it, and added his comments, the papers are returned to the original sender, whose name appears at the bottom of the forwarding slip.

PASS TO THOSE WHOSE INITIALS ARE NOT CROSSED OUT

This is sent to you for your ☐ opinion ☐ information ☐ approval

READ PROMPTLY Note your comments. . . . . Pass to next on list. . . . . .

Return to sender after all names are checked or crossed out

	NAMES	Date received by each	Each to INITIAL here	COMMENTS
	D. L. C.			
	E. F. L.			
	G. R. C.			
	J. D. O.			
	T. C.			
	H. J. S.			
	H. L. K.			
	E. M. R.			

Sender _____ Date sent _____

Sender's comments:

FIGURE 24—LETTER HANDLING FORM

7. *Accuracy in making address changes.*—Many a customer is vexed by receiving mail addressed to him at a former place of business, especially when he has notified the company of the change in location.

(1) DIGEST DEPARTMENT
Digest Card corrected by.....

(2) STENCIL DEPARTMENT
Stencil corrected by.....

CHANGE OF PROSPECT ADDRESS

Date.....

As We Have It Now	As It Should Be
Name.....	Name.....
Street.....	Street.....
City.....	City.....
Salesman (old).....	Salesman (new).....
	Instructions of.....

FILING DEPARTMENT
Cross File Card corrected by..... Date.....

CHANGE OF PROSPECT ADDRESS

Date.....

As We Have It Now	As It Should Be
Name.....	Name.....
Street.....	Street.....
City.....	City.....
Salesman (old).....	Salesman (new).....
	Instructions of.....

Mr.....Salesman

CHANGE OF PROSPECT ADDRESS

Date.....

As We Have It Now	As It Should Be
Name.....	Name.....
Street.....	Street.....
City.....	City.....
Salesman (old).....	Salesman (new).....
	Instructions of.....

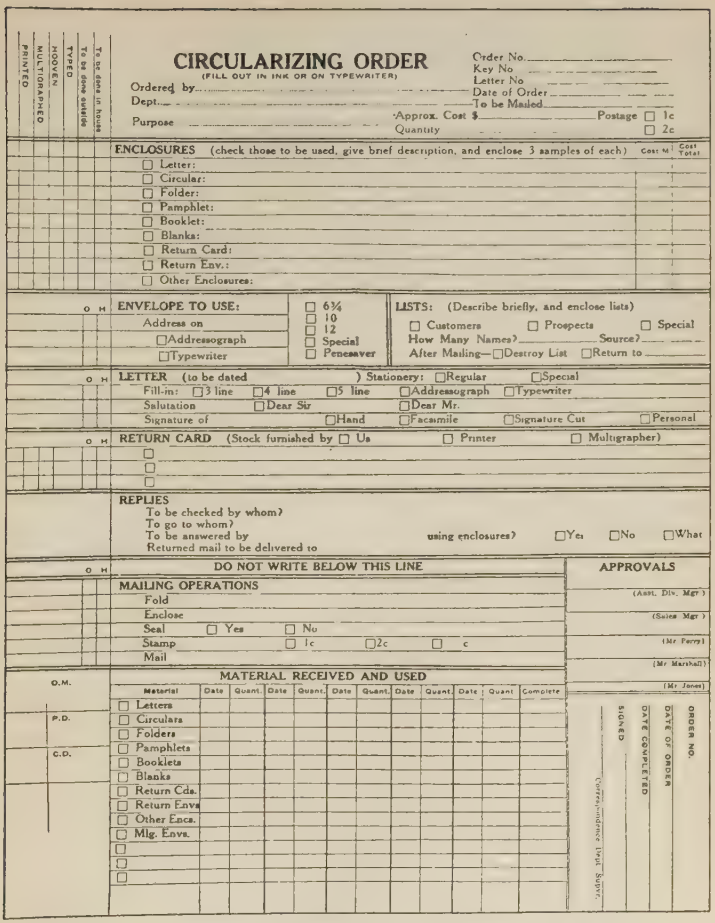
FIGURE 25—CHANGE OF ADDRESS FORMS

Two reasons usually account for this awkward situation:

(a) The change is overlooked in the rush of the day's work, because no one in particular assumes the responsibility of making the change
(b) While the name and address may have been changed on one record, the correction may not have been made properly on all records

One office takes care of this problem through the use of the forms shown in Fig. 25. These are provided in different colors to indicate the departments to which they are to be sent by the one who is responsible for the making of such corrections. In the case illustrated, one form is prepared for the use of the Digest and Stencil Department, another for the Filing Department, and still another for the salesman who deals with the customer affected.

8. *Simplifying the mailing of circulars.*—There are so many details in connection with the mailing of circulars that some firms find it desirable to use a printed form to control this activity. One company, whose frequent mailings reach into the tens of thousands, prepared the direction sheet shown in Fig. 26. The use of this sheet makes it practically impossible to overlook any detail. The mere recording of the necessary information serves to prompt the memory of the sales-promotion man. The original copy is printed in light-green ink on white paper, so that typewritten instructions will stand out clearly. The



CIRCULARIZING ORDER
(FILL OUT IN INK OR ON TYPEWRITER)

Ordered by
Dept.
Purpose

Order No.
Key No.
Letter No.
Date of Order
To be Mailed
Approx. Cost $ Postage ☐ 1c ☐ 2c
Quantity

PRINTED · MULTIGRAPHED · HOOVER · TYPED · To be done outside · To be done in house

ENCLOSURES (check those to be used, give brief description, and enclose 3 samples of each) Cost M | Cost Total

☐ Letter:
☐ Circular:
☐ Folder:
☐ Pamphlet:
☐ Booklet:
☐ Blanks:
☐ Return Card:
☐ Return Env.:
☐ Other Enclosures:

O H **ENVELOPE TO USE:**
Address on
☐ Addressograph
☐ Typewriter

☐ 6¾
☐ 10
☐ 12
☐ Special
☐ Penesaver

LISTS: (Describe briefly, and enclose lists)
☐ Customers ☐ Prospects ☐ Special
How Many Names? Source?
After Mailing—☐ Destroy List ☐ Return to

O H **LETTER** (to be dated) Stationery: ☐ Regular ☐ Special
Fill-in: ☐ 3 line ☐ 4 line ☐ 5 line ☐ Addressograph ☐ Typewriter
Salutation ☐ Dear Sir ☐ Dear Mr.
Signature of ☐ Hand ☐ Facsimile ☐ Signature Cut ☐ Personal

O H **RETURN CARD** (Stock furnished by ☐ Us ☐ Printer ☐ Multigrapher)
☐
☐
☐

REPLIES
To be checked by whom?
To go to whom?
To be answered by
Returned mail to be delivered to
using enclosures? ☐ Yes ☐ No ☐ What

O H **DO NOT WRITE BELOW THIS LINE**

MAILING OPERATIONS
Fold
Enclose
Seal ☐ Yes ☐ No
Stamp ☐ 1c ☐ 2c ☐ c
Mail

APPROVALS
(Asst. Div. Mgr.)
(Sales Mgr.)
(Mr. Perry)
(Mr. Marshall)
(Mr. Jones)

O.M.
P.D.
C.D.

MATERIAL RECEIVED AND USED

Material	Date	Quant.	Date	Quant.	Date	Quant.	Date	Quant.	Date	Quant	Complete
☐ Letters											
☐ Circulars											
☐ Folders											
☐ Pamphlets											
☐ Booklets											
☐ Blanks											
☐ Return Cds.											
☐ Return Envs.											
☐ Other Encs.											
☐ Mlg. Envs.											
☐											
☐											
☐											

Correspondence Dept. Stamp
SIGNED
DATE COMPLETED
DATE OF ORDER
ORDER NO.

FIGURE 26—CIRCULARIZING ORDER

"duplicate" is printed in light-green ink on canary-colored paper.

The lower half of the "duplicate," which is retained by the sales-promotion man, is printed differently

from the lower half of the original. This section of the "duplicate" is ruled in such a way that it provides space for the recording of results from the mailing of the circular concerned. Fig. 27 shows the lower part of the "duplicate."

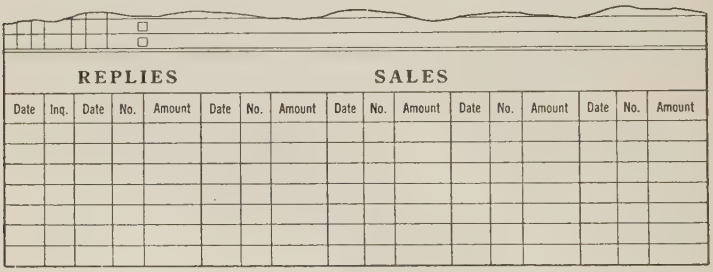


FIGURE 27—REPORT OF REPLIES RECEIVED AND SALES

9. *Recording individual output.*—Wherever possible, it is highly desirable to have a record of each employee's output. The form of daily report shown in Fig. 28, for the use of stenographers, indicates the kind of work which the stenographer does during the day, the time taken to do it, and the person for whom it is done. If the stenographer happens not to be working at any time during the day, that period of non-employment is recorded. The report shown here indicates, in the right-hand column, the number of lines typed for each person whose name appears. At the bottom of the report, figures are recorded which indicate the exact time devoted to each type of work, the exact time that the stenographer was not working, and the total number of lines typed.

A summary of these daily stenographic reports is

STENOGRAPHER'S DAILY REPORT

DATE May 20, 19-- NAME Miss E. R. James

Time Began	Time Finished	Dictation	Transcription	Copying	Miscellaneous	Not Working	For Whom	No. of Lines Typed
A. M.								
9:00	9:08				:08		(Preparing Record)	
	9:30		:22				Mr. White	48
	10:40	1:10						
	10:45					:05	(out)	
	11:30	:45					Mr. Coffman	
	12:00			:30			Mr. Robinson	98
P. M.								
1:00	2:40		1:40				Mr. White	207
	2:55			:15			Miss Currier	48
	3:00					:05	(out)	
	4:25		1:25				Mr. Coffman	280
	4:50	:25					"	
	5:00				:10		(Comparing-Miss Currier)	
TOTALS		2:20	3:27	:45	:18	:10		681

FIGURE 28—STENOGRAPHER'S DAILY REPORT

made up monthly. This form is represented in Fig. 29. It shows, for the stenographers:

(a) The amount of time spent on each kind of work during the month
(b) The number of lines typed

STENOGRAPHIC MONTHLY SUMMARY REPORT

For May 19--

Name	Dictation	Transcription	Copying	Miscellaneous	Not Working	Absent	No. of Lines Typed
R. G. Allen	48:00	100:30	36:10	3:10	2:10	10:00	18,363
C. M. Buck	61:10	94:08	8:07	24:20	12:15	-----	16,570
J. E. Davis	72:30	109:40	-----	9:10	8:40	-----	19,143
E. R. James	63:10	93:20	28:00	4:10	4:05	7:15	17,472
L. M. Marsh	35:40	51:00	32:30	3:30	7:20	70:00	9,522
H. R. Messer	79:50	111:20	-----	2:40	6:10	-----	20,243
E. W. Smith	55:00	94:30	-----	29:25	7:05	14:00	15,025
TOTALS	415:20	654:28	104:47	76:25	47:45	101:15	116:338

FIGURE 29—STENOGRAPHERS' MONTHLY REPORT

(c) The time absent
(d) The time not working

The value of such a report, especially in a large department, is obvious.

For purpose of work study, it may be desirable to compile information showing

(a) The kinds of stenographic work done
(b) The total time devoted to each type of work
(c) The volume of work done
(d) The percentage of each kind of work in relation to the total work done

The form illustrated in Fig. 30 shows how such a report would appear. It is much less elaborate than the one mentioned above; yet, for its purpose, it is equally useful.

MONTHLY SUMMARY REPORT
STENOGRAPHIC DEPARTMENT
For May, 19.....

Operation	Time	Per Cent of Total
Dictation:	415:20	30
(1) Transcription	654:28	47
(2) Copying	104:47	8
Miscellaneous	76:25	5
Not Working	47:45	3
Absent	101:15	7
Totals	1,400:00	100
Typing:		
(1) Transcription	654:28	.....
(2) Copying	104:47	.....
	759:15	.....
Total Lines Typed	116,338	.....
Lines Typed per Minute	2.55	.....

FIGURE 30—SUMMARY REPORT OF STENOGRAPHIC DEPARTMENT

The simple form shown in Fig. 31 shows the individual stenographer's record from the standpoint of errors. This particular form shows four types of errors. If these are combined into a monthly report like that shown in Fig. 32 a useful comparative record is obtained.

10. *Speeding up correspondence.*—The form shown in Fig. 33 is used to facilitate the handling of letters that, when opened at the mail desk, are seen to demand the attention of more than one department. The mail clerk marks the original letter with colored pencil, indicating the parts of the letter that

are to go to the different departments. Then the letter is turned over to a typist who "extracts," on the form here shown, the portion of the letter that is to go to each department. Provision is made on

Date..... Steno.....

No. of letters returned for correction.....

Errors:

Spelling.....

Punctuation.....

Grammar.....

Carelessness.....

FIGURE 31—STENOGRAPHIC DEPARTMENT FORM FOR CHECKING ERRORS

the form for indicating the department to which the original has been sent. This precaution is taken to facilitate reference to the original if necessary.

11. *Handling mail and inclosures.*—The slip shown in Fig. 34 is printed on inexpensive manila paper. Such slips are used in sending letters and papers from department to department. The use of a form of this character will save much time on the part of office employees.

The form shown in Fig. 35 is useful when correspondents frequently send printed matter with their letters. The supply of printed matter is kept at the outgoing-mail desk. The correspondent prepares one of these inclosure blanks as he dictates the letter, or

STENOGRAPHIC DEPT. MONTHLY REPORT
TYPING ERRORS—CLASSIFIED

For.....

Name	No. of Lines Typed	Spelling	Punctuation	Grammar	Carelessness	Totals
Totals						

FIGURE 32—REPORT OF TYPING ERRORS—CLASSIFIED

as he reads it before affixing his signature, checking the items that he wishes to have sent with the letter. The mail clerk does the rest.

Because postage stamps are small in bulk, their high value sometimes is overlooked. A statement like

To_____ Department

The following EXTRACT is taken from a LETTER dated_____

Received from_____

Extracted by_____ on_____ from letter going to_____ Dept.

FIGURE 33—FORM FOR EXTRACTS TAKEN FROM LETTERS

HOUSE MAIL SLIP

Check to show destination

Attach this slip to papers to be forwarded and drop in outgoing basket

☐ Adjustments	☐ Maintenance
☐ Advertising	☐ Mfg. Supt.
☐ Auditing	☐ Office Mgr.
☐ Bookkeeping	☐ Purchasing
☐ Cashier	☐ Returns
☐ Correspondents	☐ Sales
☐ Credit	☐ Sample Floor
☐ Designing	☐ Shipping
☐ Employment	☐ Special Order
☐ Central Files	☐ Traffic
☐ General Office	☐ Transcribing
☐ Mail Order	☐ Usher

MESSAGE

To_____ Date_____ Hr._____

_____

_____

_____

From_____ Dept._____

(Continue message on other side if necessary)

FIGURE 34—HOUSE MAIL SLIP

INCLOSURE BLANK

.....Advertising Booklet No. 3..... ☐
.....Return Envelope STAMPED..... ☐
.....Return Envelope..... ☐
.....Reply Card No. 1..... ☐
.....Reservation Blank..... ☐
.....Agents' Blank List..... ☐
.....Record of Sale..... ☐

CIRCULARS

.....
.....
.....
.....
.....

FIGURE 35—INCLOSURE BLANK

the one illustrated in Fig. 36, made at definite periods, will serve to show the use and disposition of stamps.

Sometimes it is desirable to have a daily report of letters mailed. The form given in Fig. 37 serves this purpose admirably.

12. *Filing department report.*—The report shown in Fig. 38 represents a summary made at the end of the day. It is prepared by the chief file clerk for the use of the office manager. As the work passes through the filing department, the clerk examines it and counts the pieces handled, recording the totals on

this report. Probably the information covered in this particular report is more comprehensive than many managers would require. Ordinarily, a statement of the total number of pieces received, filed, and given out is all that is necessary.

THE LIQUID CARBONIC COMPANY

_____ BRANCH

STAMP STATEMENT MONTH OF ____ 19

DENOMINATIONS	1	2	3	4	5	6	8	10	SPECIAL DELIVERY	15	POSTALS	TOTALS
ON HAND												
REMITTED												
BOUGHT												
TOTAL												
DISBURSED												
ACCT'G & CREDIT												
SALES												
ADVERTISING												
PACKING & H'D'L'G												
PERSONAL USE												
EXTRA POST & SUND												
TOTAL												
BALANCE ON HAND												

APPROVED_____ MANAGER

CORRECT_____ CASHIER

FIGURE 36—STAMP STATEMENT

13. *Controlling work reports.*—Whenever reports are used, it is almost essential that the manager have some method of making sure that he receives the reports with strict regularity. A simple card record, like that shown in Fig. 39, enables the manager to check each report as it is received. A glance at this check list will indicate plainly the unchecked items,

DAILY RECORD OF LETTERS, ETC., MAILED _____

LETTER NO.	QUANT.	DEPT.	POSTAGE				REMARKS
			DENOM.	MISC.	CITY	COUNTRY	
TOTAL							

BALANCE	PURCHASES	DISBURSEMENTS	ON HAND

FIGURE 37—DAILY LETTER RECORD

FILING DEPARTMENT DAILY REPORT

.....19....

Index	No. Pieces Completed	Time
Assorting Correspondence		
Assorting Cards		
Numbers on Mail		
Unclassified Mail		
Total Cards Looked Up		
Index Cards Filed		
Checking Files		
Geographical Files		
Verifying Addresses		
Specials (Requests for Folders)		
Specials (At Index)		
Mail-order Mail		
Stamping Mail		
Miscellaneous		
Reports		

FIGURE 38—DAILY REPORT OF FILING DEPARTMENT

and enable the manager to issue a call immediately for the missing reports.

14. *Typical bar chart.*—The type of bar chart illustrated in Fig. 40 has many uses. It is simple to make and exceedingly convenient for ready reference. The lengths of the horizontal bars show the number of units concerned. Any extraordinary conditions are strikingly indicated.

15. *Standardization applied to messages.*—We have said quite a bit about the application of the principle of standardization. This principle frequently can be extended to certain types of correspondence. Reference to Fig. 41 shows a form of notice that is used when an order has to be shipped incompletely.

TICKLER FILE

DAILY REPORTS for the week ending.....

	M	T	W	T	F	S
Incoming Mail						
Outgoing Mail						
Files						
Stenographers						
Printing						

FIGURE 39—FORM FOR CHECKING REPORTS

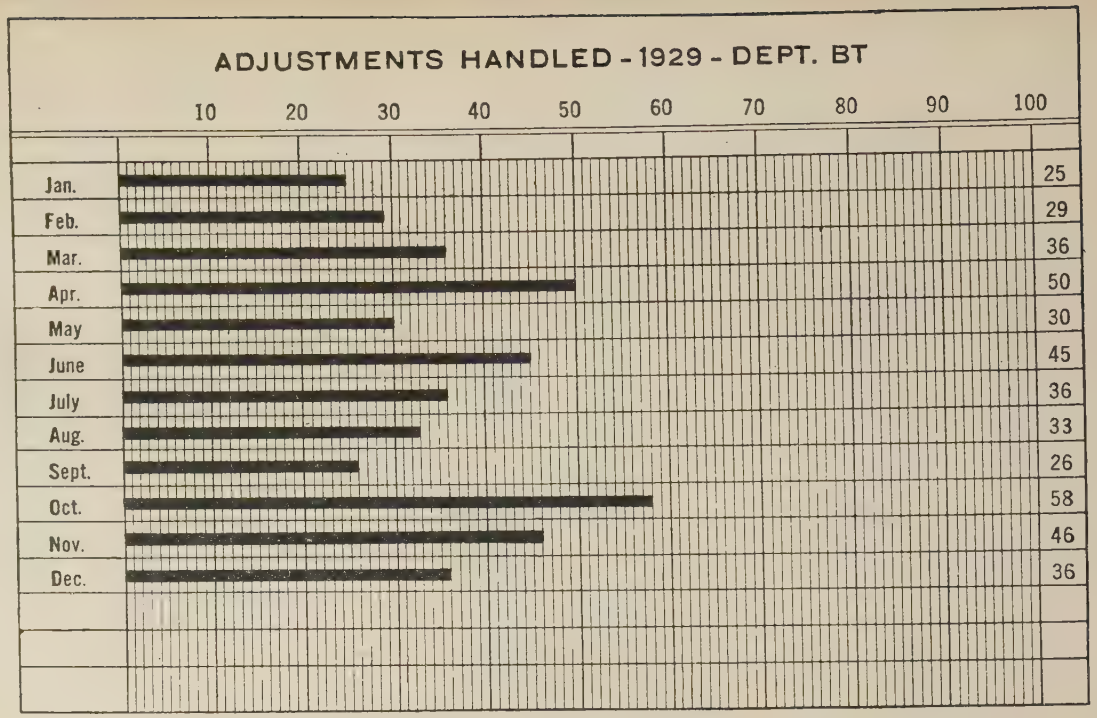


FIGURE 40— CHART FOR ADJUSTMENTS HANDLED

D. L. CURRIER COMPANY
THIRTY SEVEN GARRISON ROAD, BOSTON

Name C.E.JONES CO. Date APR. 3.19
Town and State PORTLAND MAINE Our Order No. 231689

ITEMS OMITTED FROM YOUR ORDER

2 10 Gr 1½X10 F.H. BRT. SCREWS

10 1 BBL. W & H BOILED LINSEED OIL

KEY OF INFORMATION

1. Will be in stock again and will include with your first freight order unless advised to the contrary.
2. Stock temporarily out and could not obtain in the city, but will be on hand again shortly. We are cancelling and if you are still in need kindly re-order.
3. Can be obtained from factory only. Will be glad to order for direct shipment if so instructed by you.
4. Description incomplete. Please give number if possible, or size and name of manufacturer.
5. We procured especially for you in the city, but did not receive in time to include. We are holding and will send with next freight shipment.
6. Have ordered from factory to our store with first freight shipment Will advise when received.
7. No longer carried in stock. Shall we order from factory for you?
8. Do not carry and cannot obtain, therefore have cancelled.
9. Have entered on back order to follow in a few days.
10. Will be shipped direct from factory.
11. We are out and will have no more this season, therefore have cancelled.
12. We were unable to include in this shipment, but can possibly obtain and forward alone or with next order. Kindly advise.
13. We did not have and not wishing to delay your order have cancelled.
14. Do not carry and cannot obtain in city at present. Shall we try factory?
15. See letter on reverse side of sheet.
16. We are out and, owing to uncertain conditions due to the war, are unable to say when we will have. Have cancelled.

N. B.—In the event you have occasion to write us about any of the above items, please return this sheet with your letter.

FIGURE 41—SHIPPING DEPARTMENT FORM

This notice is placed with the goods shipped. When the shipment is opened by the customer, he finds the notice indicating that certain items are omitted, the reasons for the omission, and the action that is being taken by the company to fill the order completely.

The slip actually is a carbon copy of the "back order." Thus it does not even require separate typing. In this instance, the company has found that the standard information given at the bottom of the form will cover practically all cases. Consequently, a thoroughly understandable message is conveyed to

D. L. CURRIER AND COMPANY
37 GARRISON ROAD, BOSTON

.....19.....

Would it be convenient for you to call for a personal interview

.....at.....M

regarding a position as.....?

A more convenient time can be arranged by phoning Liberty.....

Yours very truly,

D. L. CURRIER AND COMPANY

.....

Employment Service Department

FIGURE 42—PERSONAL INTERVIEW FORM

the customer through the simple expedient of marking in pencil, opposite each item short on the order, the number referring to the proper line in the standard remarks as printed at the bottom of the slip.

Courtesy is of special importance in communicating with prospective employees. The form shown in Fig. 42 is used by a large corporation when it wishes to request an applicant for a position to call for an interview. It is a simple card form, much more easily prepared than a letter would be, and yet it carries its message in a courteous way.

16. *Controlling telegrams and telephone calls.*—In an endeavor to cut down telegraph costs due to carelessness in using telegrams, one concern had an extra copy made of each telegram issued. These extra

To.....Department

The attached copy of your telegram with suggestions noted is referred to you for your consideration. If you do not agree with the comments of the censor or if you think they are not justified, return the telegram to the Service Improvement Department within 5 days, together with your reasons for believing that a charge should not be made against your efficiency record.

No..... Charge 1.....2.....3.....

FIGURE 43—TELEGRAM EFFICIENCY RECORD CHECK

copies were sent to one person who was appointed "telegram censor." If he thought that a telegram could be improved in any way, he noted the change and sent it to the author of the telegram. With it he sent one of the memorandum sheets shown in Fig. 43.

Another company, in an effort to reduce the number of telephone calls, required each of its salesmen to fill out a slip like that shown in Fig. 44 covering

TELEPHONE CALL

Must be filled out and mailed to Boston office for every call involving a charge.

Date_____ Call made by_____

Party called_____

_____

Nature of business_____

Time consumed_____ Cost_____

Signed_____

FIGURE 44—TELEPHONE CALL CHECK

ROUTE

Mail on FRIDAY of each week so that we may know just where to reach you with Mail, Telegrams and Express.

MONDAY, _____ *Town* _____ *State* _____

Care of _____

TUESDAY, _____ *Town* _____ *State* _____

Care of _____

SATURDAY, _____ *Town* _____ *State* _____

Care of _____

SUNDAY, _____ *Town* _____ *State* _____

Care of _____

REMARKS: _____

_____

_____

Signed _____

IMPORTANT! **If you make any change in above route**
TELEGRAPH US AT ONCE

BE SURE TO GIVE DATE AS WELL AS DAY

H. W. WILLIAMS COMPANY
NEW YORK

FIGURE 45—ROUTE SLIP FOR DAILY CHANGE OF ADDRESS

every call involving a charge. These slips were sent to the head office.

Unless a company can reach its road men almost immediately, situations may come about, and delays ensue, which will be embarrassing. The concern that uses the form shown in Fig. 45 finds it neces-

sary to telegraph price changes to its salesmen daily. Therefore, it is imperative that the company shall know, each day, just where each man is to be located.

17. *Standardization of forms.*—The forms just presented have been introduced merely to illustrate a few ways in which printed forms help to facilitate the office activities. Whenever forms are considered, the following points should be kept in mind:

(a) Exact purpose
(b) Economy of use
(c) Standardization of sizes and shapes
(d) Standardization of papers and colors
(e) Standardization of typography

It is not uncommon to find a form printed satisfactorily for pen-and-ink use but actually intended for typewriter use. If the spacing of lines is not in conformity with standard typewriter spacing, obviously the use of such forms results in much wasted time, due to adjusting the typewriter platen from line to line.

The designer of a form should select the type face that will best serve the purpose, rather than leave the selection to the printer. A "condensed" letter, which takes up less room than the ordinary type face, at least horizontally, may be employed to advantage. When a thoroughly practicable face has been selected, it should be used, whenever feasible, in printing other office forms.

A difference in color sometimes is used to distinguish one form from another; but care must be

taken, in all cases, to see that no color is used which will have a bad effect upon the eyes of the user. The general tendency in offices today is to reduce, rather than increase, the number of colors.

It is desirable to confine the forms to certain standard sizes. This means that such forms can be used in binders and filing cabinets of standard sizes. It means, also, that they can be cut without waste from sheets of paper of standard dimensions.

REVIEW

State the function of office forms.

In what manner may a form such as Fig. 22, for the daily report of correspondence, assist in controlling office operations?

Comment on the value of a form such as Fig. 23 for the disposition of carbon copies.

State the manner in which "conferences" are held through interdepartmental mail service.

Describe a method of simplifying the mailing of circulars.

Develop a form for the recording of individual output in connection with some office work with which you may be familiar.

Describe a convenient method for routing office mail.

Outline the time-saving features obtained by standardization of messages, with special reference to Fig. 41.

List the factors that should be kept in mind in standardizing forms.

CHAPTER XXI

ADMINISTRATIVE CONTROL

1. *Efficiency and quality.*—The administrator is interested particularly in the volume of work that his office organization must handle, and in the capacity of the organization to handle that volume. Accordingly, he wants detailed information about the cost of handling and about the effectiveness with which the work is completed.

The work must be handled with dispatch, and the finished product must be of required quality. Quality in office work is measured by accuracy, appearance, and completeness. An invoice that is inaccurate in any respect is of poor quality. A typewritten letter that contains strike-overs or careless erasures is of poor quality. A report that is a model of neatness and accuracy, but not wholly complete within the required limits, is really a poor report.

2. *Standards of accomplishment.*—The administrator must fix a standard of accomplishment, if he is to judge correctly the effectiveness of the office. The mere fact that a certain amount of work has been done means little unless that work is measured by certain standards. These standards may be listed as follows:

(a) How well was the work done?
(b) Could it have been done more satisfactorily?
(c) How long did it take?
(d) Need it have taken so long?
(e) What did it cost?
(f) Need it have cost so much?

With answers to these questions before him, the administrator is in a position to consider:

(a) How the quality of the work can be improved
(b) How the time required to do it can be lessened
(c) How the cost of doing it can be reduced

3. *Research a necessity.*—The consideration of these problems will involve considerable research. If the research work is done properly, and the recommendations are applied effectively, immediate improvement in performance will result. The truth of the matter is, however, that very frequently the facts are compiled altogether too hastily. A "half-baked" investigation is not scientific. Scientific procedure must be based upon organized knowledge, and never upon unsupported opinions formed from incomplete data.

This requirement of thoroughness does not mean that the administrator should take no action whatsoever to improve conditions until he has complete information on every detail. Such a policy of inaction would be disastrous. Competition waits for nothing. Even while the research is in progress, it will be necessary to make such improvements as are suggested by past experience and common sense. The important

point to remember is that the information-gathering and fact-finding forces must never be idle if they are to bring together and present the latest accurate data.

There is, at any given time, "one best way" of doing everything associated with clerical activities. Scientific research should discover that one best way. As conditions change, of course, methods may have to be changed, but the fundamental principles remain the same.

After the administrator has determined how the quality of work can be improved, how the time of doing it may be lessened, and how the cost of doing it may be reduced, his next problem will be to find the right persons to carry out the necessary action. The following questions are involved:

(a) Who is available for this task?
(b) Who of those available is best fitted? Why?
(c) How soon can he undertake it?
(d) Does he need any additional help?
(e) Will he need additional facilities?
(f) Are the additional facilities available?
(g) If not, can they be gotten? Where? How soon?
(h) What will they cost?

4. *Elements of administrative control.*—Within the limits of our Text we have endeavored to show that effective office control can be exercised only when the management is familiar with every detail of the facilitating functions that the office is expected to render. The manager may be said to be in control only when it is evident that the work is completed

within the period assigned and in exact accordance with the specifications. This condition might be referred to as executive control of the office. Let us turn, then, to the administrator and his control problem.

Administrative control may be said to include the following:

(a) Knowing exactly what work is to be done
  (1) As to quantity
  (2) As to quality
  (3) As to time available

(b) Knowing what resources are available for doing that work
  (1) As to personnel
  (2) As to materials
  (3) As to equipment
  (4) As to other facilities

(c) Knowing that the work has been done, or is being done
  (1) With the resources available
  (2) Within the time available (which involves quantity)
  (3) At a reasonable cost (compared with standard cost)
  (4) In accordance with the required standard of quality

(d) Knowing immediately of any delays, hold-ups, or variations
  (1) As to the happening
  (2) As to the cause
  (3) As to the remedy

(e) Knowing what is being done to remove such hindrances

(1) As to who is doing it
(2) As to how he is doing it
(3) As to what it is costing
(4) As to when it will be done

(f) Knowing when it is done
(1) As to time finished
(2) As to quality of the finished job
(3) As to final cost
(4) As to who did it

(g) Knowing that recurrences are guarded against
(1) In what way
(2) By whom
(3) At what cost
(4) With what provision for periodic inspection

We have stressed *knowing how things are done* instead of *getting things done.* Getting things done is the executive responsibility of the office manager, while "knowing" that they are being done, or provided for, is peculiarly the responsibility of the administrator.

5. *The control mechanism.*—Let us consider the mechanism through which the administrator secures the information that he must have in order to exert control. Information comes to him in two ways:

(a) By reports from others
(b) By personal observation

Naturally, his opportunities for personal observation are limited. Therefore, he has to depend upon reports from others for the bulk of the information he gets. Such reports may be oral or written. Oral

reports usually supplement written ones. Frequently, they convey information of so recent and vital a nature that action must be taken, without any delay, on the conditions reported. In other words, oral reports usually are of an emergency nature.

Written reports, on the other hand, may be either special or regular. Special written reports pertain exclusively to special aspects or special situations. Regular written reports are those that are made at regular intervals, such as hourly, daily, weekly, monthly, or annually. These regular reports may be detailed or summarized. A summary report usually gives merely the main points and the conclusions arrived at, without the detailed facts and figures supporting the summary. To be reliable, a summary report should give some indication of the sources of information, if there is any likelihood of reference being made to such sources. A detailed report, as its name indicates, gives the detailed facts and figures upon which the summary report is based. Sometimes it is attached to the summary report which it supports.

This important point should be kept in mind—the administrator depends upon the adequacy of the facts presented to him and quite as much upon the promptness with which all vital facts are submitted.

6. *Charts and graphs.*—It often is feasible to see that reports to the administrator are illustrated by means of charts and graphs. These are valuable chiefly because they show the facts at a glance. The

right kind of a chart, properly prepared from reliable statistics, tells an exceedingly interesting story. It shows what happened under certain conditions. Things which are happening presumably will continue to happen as long as the conditions responsible continue to exist. That tendency is called the "trend." The trends shown by the office reports are important to the administrator. If the volume of work is increasing, it will tend to keep on increasing as long as the conditions responsible for the increase continue in force. If the volume is decreasing, it will tend to keep on decreasing. Either case may call for an adjustment in personnel, in proposed expenditures, and in methods of doing the work. By ascertaining the causes of fluctuations, the administrator can determine the significance of those changes and lay his plans accordingly.

In many businesses, particularly those which have marked seasonal characteristics, a graph covering a period of a year will show what fluctuations may be anticipated for the succeeding year. The movements of related items can easily be watched by means of graphs. Items which tend to move up and down together, or which tend to move in contrary directions, are readily located and their influence on each other noted. An illustration of the usefulness of the graph is indicated by Fig. 19, appearing in Section 4 of Chapter XIX.

7. *Information reported.*—Probably the most important item to be reported to the administrator con-

cerns the amount of work actually done in a given period of time. All work that is received must be handled within a certain period of time. Otherwise costly delays will ensue. In many offices, the volume of work to be handled can be estimated for the office as a whole by counting the number of pieces received in the mail. For office departments and sections, the amount of work to be done is found by counting the work going through the previous operation or previous department.

Some office managers require their department heads and section heads to send them information, early each morning, relating to the condition of the work in their charge. Such information may include:

(a) Quantity of work left over from the previous night, if any
(b) Quantity received in the morning of the current day
(c) Total to be worked on
(d) Normal daily volume for the department or section
(e) Number of employees absent
(f) Steps that are being, or have been, taken to do the work of absent employees

To report vital facts to the administrator, the manager needs to know that the office work is being done strictly according to schedule. In some cases, hourly reports to the manager may be desirable, especially where close scheduling is involved, but usually a daily report, at the end of the day, meets all requirements. The daily report to the manager should show:

(a) Quantity of work left over from the previous night, if any
(b) Quantity received in the current day
(c) Total quantity to receive attention
(d) Quantity actually handled
(e) Quantity left over at end of day, if any
(f) Reason for work being left over

Such a report will show whether any department or section is getting behind in its work, and, if so, the reason for the delay.

The office manager may find that a daily report, like that shown in Fig. 46, can be used effectively to advise the administrator of the trend of various activities throughout the office. In preparing such a form, it is well to exclude any detailed information that may prove to be confusing. To be effective, the daily report should cover only the "high spots" of each activity.

Often, it will be necessary to prepare special reports covering certain facts. This is true when starting any new piece of work. Special reports should be designed to give only the information actually required, and they should be discontinued as soon as their need has passed.

8. *Conclusions.*—The only way the administrator can keep his finger on the pulse of the business is through adequate control. "Control" signifies more than merely knowing what is going on. It means knowing what steps to take to produce the desired results—and taking them in time to be effective. Someone has said that nine-tenths of wisdom is being

GENERAL OFFICE DAILY SUMMARY FOR.....19....

Item	Current Day	Month to Date	Last Month	Two Months Ago
General Information:				
Collections				
Orders				
Total mail				
Number of remittances				
Collection Department:				
Remittances entered				
Notations made				
Follow-up sent (total)				
First bills				
Reminders				
Form letters				
Cards filed				
Filing Department:				
Index numbers				
Folders dispatched				
Correspondence filed				
Folders filed				
Changes of Address				
Cards looked up				
Order Department:				
Orders typed				
Transcribing Department:				
Total lines typed (Transcribing)				
Total pieces checked				
Total pieces ret. for correction				
Printing Department:				
Multigraph lines composed				
Multigraph pages reproduced				
Multicolor lines composed				
Multicolor pages reproduced				
Press lines composed				
Press pages reproduced				
Mailing Department:				
Total outgoing mail				
Shipping Department:				
Tracer letters written				
Total shipments made				
Personnel data:				
Total avoidable errors (pre. week)				
Lateness (times)				
Absence (days)				
Total employees (prev. Sat.)				
Total salary charge (prev. Sat.)				
Total overtime (prev. Sat.)				
Number of working days				

FIGURE 46—GENERAL OFFICE DAILY SUMMARY REPORT

wise in time. The administrator must so organize his control mechanism that it will furnish him with the information that he must have for control purposes and furnish such information in time for his use in correcting faulty conditions—or in taking advantage of favorable conditions that may last only a short time.

In the preceding chapters, we have surveyed the major problems of the office. We have seen that the art of management, which has brought such beneficial results in the factory, actually can be used to produce correspondingly beneficial results in the office. Owing to the general indifference of many business executives to the subject of clerical work, real scientific management has been sadly lacking in a large number of office organizations. It is safe to predict, however, that diminishing profits eventually will force all executives to pay more attention to the wastes hidden in clerical costs.

When the importance of scientific office management is fully recognized and the administrator turns his thoughts to the clerical service, he will have before him a research problem of considerable magnitude. He should not begin his investigation by turning to this or that element of office organization and attempting to determine the efficiency of that one element. His object should be, rather, the scientific evaluation of the *existing management*. We have seen the importance of job analysis and measurement of the worker's output. Somewhat similar principles

might well be kept in mind by the administrator in studying the work of the management. The purpose of Management, as pointed out in the first chapter, is to execute most effectively the policies of Administration. Therefore, when the time comes for searching inquiry, Administration needs to know primarily that Management itself is fulfilling its obligations.

Efficiency in dealing with personnel problems; competency in maintaining a low rate of turnover; ability to bring about the most economical use of space; skill in maintaining definite lines of authority within the organization; expertness in developing routines and methods; and power to control the office output are likely to be the most vulnerable points. The investigation should be extended to the other factors that our chapters have covered, such as the general efficacy of intercommunication, correspondence, filing, mailing, office equipment, and standard forms. In all probability this investigation, particularly in a large organization, will necessitate the aid of a management engineer. Even so, the administrator should prepare himself, through a study of the principles involved, to appreciate fully the significance of each element.

REVIEW

State what is meant by a "standard of accomplishment" and list five such classes of standards.

Explain why research is a necessity to office work.

List the seven important elements of administrative control and give an example of each.

Discuss the value of written reports from the standpoint of controlling office work.

Explain the value of graphs for indicating trends.

Tabulate the factors that should appear on a daily work report prepared by the head of an office department.

Discuss briefly the question of control of office operations from the point of view of the administrator.

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